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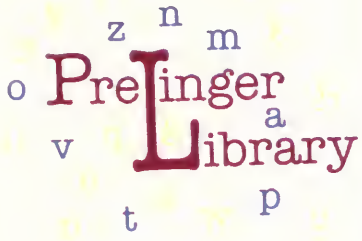
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AMERICAN PLANNING AND CIVIC ANNUAL

A RECORD OF RECENT CIVIC ADVANCE IN THE FIELDS OF PLANNING, PARKS, HOUSING, AND NEIGHBORHOOD IMPROVEMENT, INCLUDING THE PRINCIPAL PAPERS DELIVERED AT THE NATIONAL CONFERENCE ON PLANNING, HELD AT PHILADELPHIA, PENNSYLVANIA, MAY 12–14, 1941, AND THE MISSISSIPPI VALLEY MEETING OF THE NATIONAL CONFERENCE ON STATE PARKS, HELD IN PERE MARQUETTE STATE PARK IN ILLINOIS, JUNE 2–4, 1941.

EDITED BY

HARLEAN JAMES

AMERICAN PLANNING AND CIVIC ASSOCIATION

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THE purpose of the American Planning and Civic Association is the education of the American people to an understanding and appreciation of: local, state, regional and national planning for the best use of urban and rural land, and of water and other natural resources; the safeguarding and planned use of local and national parks; the conservation of natural scenery; the advancement of higher ideals of civic life and beauty in America; the improvement of living conditions and the fostering of wider educational facilities in schools and colleges along these lines.

NATIONAL CONFERENCE ON STATE PARKS

THE purpose of the National Conference on State Parks is to inform the public through a central clearing house of information, publications, conferences, courses of training in schools and colleges, and by other educational means, of the value of state parks, historic sites, forests and preserves, suitable for recreation, study of natural history and science, preservation of wildlife and conservation of natural scenery, by the development within the States of well-balanced state park systems; to the end that every citizen of the United States shall have easy access to state recreation areas and appreciate their value as a recognized form of land use.

The two organizations join in the publication of

THE AMERICAN PLANNING AND CIVIC ANNUAL and the
QUARTERLY, PLANNING AND CIVIC COMMENT

PREFACE

THE year 1941 was a momentous one for the United States of America. Events of great significance forced the subject of planning into the public mind. The great migrations of population to the new war industrial centers made it necessary to provide housing and community facilities on a scale heretofore unknown on this Continent. The suddenness with which aid to Britain and actual war after Pearl Harbor came upon the Nation caused some maladjustments. At first, Federal officials were somewhat prone to push ahead at all costs, regardless of local plans and local planning officials. As we settled down into our stride, however, it became apparent that we had more and better planning assets than it was sometimes realized, *if we would only use them.* The National Resources Planning Board had assembled a staff of the forward-thinking planners from all parts of the country. It had stimulated the formation of State Planning Boards. In agricultural communities, the planning councils had been at work long enough to produce some results.

In the AMERICAN PLANNING AND CIVIC ANNUAL for 1941 we present a record of what planners are thinking and doing about the problems which are facing the Nation and its local communities. Many of the papers on planning were first delivered at the National Conference on Planning which was held in Philadelphia, Pennsylvania on May 25–27, 1941, but the Editor has exercised the editorial privilege of shortening the texts almost to Reader's-Digest scale.

The four organizations participating in the Planning Conference were:

THE AMERICAN INSTITUTE OF PLANNERS
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The sponsors were:

Art Alliance.
Better Philadelphia Committee.
Bureau of Municipal Research.
Business Men's Association of Germantown.
City Parks Association of Philadelphia.
Civic Club.
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Philadelphia Federation of Women's Clubs and Allied Organizations.
Philadelphia Real Estate Board.
Philadelphia Society for Public Administration.
Playground and Recreation Association of Philadelphia.
Women's City Club.
Women's University Club.

Immediately after the Planning Conference, the reports of the ten sessions, the Opening Address by Earle S. Draper and the Closing Remarks by Charles W. Eliot were printed in Part II of the APRIL–JUNE PLANNING AND CIVIC COMMENT and are available in that form.

The papers on State Parks were selected from those given at the Mississippi Valley Meeting of the National Conference on State Parks, held at Pere Marquette State Park in Illinois on June 2–4, 1941, at the invitation of the Division of Parks and Memorials, Department of Public Works and Buildings of the State of Illinois. A tour of inspection included Fort Chartres State Park and Cahokia Mounds State Park, near East St. Louis, in Illinois and Babler State Park, west of St. Louis in Missouri. Among the valued speakers at the Conference were two Army officers—one of whom, Brigadier General James A. Ulio, spoke on the value of state-park and other outdoor recreation for soldiers in training.

The section on THE FEDERAL CITY shows clearly the strain which is being put upon planning in the Nation's Capital, where the war-time program has brought an army of war-workers who must be provided with office space and living quarters. In Washington, well-considered plans have not always been followed so that it is apparent that the Planning Commission after the war will not only be faced with the task of planning for the future but with the much greater task of adjusting the mistakes of the past.

Readers of the AMERICAN PLANNING AND CIVIC ANNUAL are reminded that its annual civic review is supplemented by the quarterly, PLANNING AND CIVIC COMMENT.

HARLEAN JAMES, *Editor*

Washington, D. C.

THE WESTERN HEMISPHERE

Defense Resources

JOHN E. LOCKWOOD, General Counsel, Office of the Coördinator of Commercial and Cultural Relations between the American Republics, Washington, D. C.

I WISH first of all to tell you how important and how difficult in the present crisis is the planning for the Western Hemisphere. Since the outbreak of the War the changes in the conditions of the lives of the people of the other American Republics, both economic and cultural, have been rapid, and far-reaching, and the future which lies ahead of them, both immediate and for the long term, is fraught with much of the unknown.

In the field of economics, trade routes have been shattered and economic systems thrown off balance to an extent which we in our greatly diversified country would find it difficult to appreciate.

In the cultural field the shock of events in Europe has been unquestionably of deep significance. Established paths of intercourse in the fields of music, letters and the graphic arts have been obliterated. All of us are seeking new creative sources in each other.

You can never set back the clock. The effect of these changes will be felt long after the armies of the world have put away their tanks and bombers. Change is the order of our day. To meet it our planning must be adaptable and dynamic. To solve the vital and immediately pressing problems that arise in such a way that the solutions fit into an intelligent long-term and mutually satisfactory pattern presents problems calling for the exercise of the best thought of all our countries.

As we plan for the defense of our heritage, and comb the basic resources which we can call on to build this defense, there are two important factors to be considered, whose qualities and limitations must govern all our plans—first, human beings and second, geography. I would like accordingly, tonight, to say a few words to you about some of the special characteristics of each of these.

We must take into account, all of us always, that there are in the American Republics, more than 250 million people, of whom almost one-half are in the 20 other republics.

There are some surprising similarities in background and in problems of these 250 million people. All of the American Republics are individuals. Each is different from every other; but there are common patterns among the differences.

To begin with, prior to the coming of the European, Indian people of common origin occupied the whole Hemisphere. Those Indians, we are now beginning to realize, had, when the Europeans first found them, achieved a remarkable development in civilization. They had reached higher levels of civilization in some parts of the Hemisphere

than others, their population was denser in some parts than others, and their subsequent history has been different. As a result their numbers and importance vary today in different countries. But they constitute a single, common heritage of all of us.

To the shores of this Hemisphere there poured, from the XVI century on, tides of European immigration from Europe which by and large were manifestations of a common centrifugal force in Europe. During Colonial days the tides tended to separate into Spanish, French, Portuguese, and English flows from the political empires of those days.

With the end of the Colonial era a common historical heritage began to develop. The differences between us, which had largely been the product of the restrictive policies of the warring European empires of the time, began to lessen. Each of these American Republics has had its own Revolution, its own Independence Day, its own Valley Forge and Saratoga and Yorktown. They have different names such as Ayacucho, Maipu, and Boyaca. Their heroes from Marti in Cuba to Bernardo O'Higgins in Chile bear great similarity in their objectives and difficulties and achievements to our George Washington.

After the revolution, there came in varying degrees the great sweep of XIX century immigration. By this time, there were no longer the great English Empire to the North and the great Spanish and Portuguese empires to the South. In the XIX century, there was a group of young, independent American Republics with soil to be tilled and raw materials to be developed, each offering hope of a future to people living in an over-crowded, revolution-torn Europe. Many of those people came here to us; their brothers or cousins went to our southern neighbors.

So there they are, the first defense resource of the Western Hemisphere —human beings. We are similar in origin, with like history, traditions, and aspirations, a common love of independence and freedom. The whole of America is the "New World" for all of its people.

As we turn to geography we discover even more significant things. The first of these is that we North Americans inhabit most of the northern temperate zone but never have settled, to any great degree, the tropics. Our southern neighbors occupy both the northern and southern tropics as well as the southern temperate zone. The second of these facts is that the southern hemisphere has much more land area in the tropics and less in the temperate zone, while North America has its principal land area in the temperate zone. This means, gentlemen, that we live on nice cool, arable land, with relatively little jungle and swamp and mountain. Our southern neighbors have a relatively small proportion of cool, arable, pleasant land. Others of our sister republics are not so fortunate. Some have much hot, tropical, moist jungle, except on the plateau lands or where the towering Andes thrust equatorial valleys into cool mountain air.

One of the outstanding problems resulting from the geography of

our southern neighbors is that of overland transportation. It is harder and more expensive to build and maintain good roads through tropical swamps and over 14,000-foot mountain passes than to build and maintain U. S. route No. 1. And yet fine roads have been and are being built, thanks to magnificant engineering and immense toil, all the way from Mexico to Cape Horn.

Lack of capital in these countries where capital is so much needed to help in overcoming nature's problems is another very important fact to be constantly remembered in planning for our hemisphere. And I am not talking foreign exchange—dollars, pesos and pound sterling. I am talking in terms of absolute wealth—in terms of machines and skill to accomplish the tasks to which our plans are directing us.

The question of living standards is one of deep significance, not only in our immediate commercial policies, but in our broader long-term plans.

Such things as water works or hospitals or housing or nurses call for planning, for consideration of how they can be supported, and not just the immediate attractiveness of the project. I think there is a growing realization of the necessity for higher standards of living and greater purchasing power as a base for our developmental plans. Our southern neighbors are urgently seeking the benefits of new technical development; they see ahead a wider economic horizon for their people. What is needed is the best wisdom of us all.

Tropical geography means disease as well as expense and hard work. One has only to spend an hour or two with public health doctors of the American Republics to realize what a thin line they are holding against enemies of our civilization more dangerous than war. What the doctors from all our countries, working together as partners, have accomplished in making the tropics healthy for us is one of the great achievements of common endeavor of our New World.

But these achievements are not something which once having been accomplished may now be forgotten. They are achievements whose continuance is dependent upon the continued loyal coöperative work of thousands of people. This is a line of battle. There must be no retreat.

There is another geographical fact which I feel that I must mention. That fact is that the southern half of the hemisphere lies far to the east, far nearer to Europe than the nothern half. Philadelphia is due north of the west coast of South America, not the east coast. If you sail from New York to Rio de Janeiro, you sail not south but southeast, and follow the same course you would follow if you were going to Africa until you pass Cape Roque. The Lati air line from Rome reaches Rio de Janeiro in 30 to 36 hours. It takes 37 hours to make the trip from New York to Rio de Janeiro.

One further geographical fact which is of very considerable importance is the fact of the immense difficulty of communications between some of our southern neighbors and each other. For instance (ex-

cluding the still expensive luxury transportation by air) it is no inconsiderable journey to go from Quito, Ecuador, to Rio de Janeiro, Brazil, or from Montevideo to Mexico or Guatemala. Transportation routes are long and expensive. This means that many of our southern neighbors have less cultural and commercial intercourse with each other than we realize. And yet those difficulties must and will be overcome in order that we of the hemisphere may all work and plan as partners together.

There are many great natural resources in Central and South America upon which we in the United States are now drawing very heavily for our defense needs. But those resources are not just so many tons of raw material to be picked up and placed on boats and carried away. They require hard, grueling hours of work at immense altitudes, difficulties of living for men and of transportation which are staggering.

There is to the south of us a vast area full of things which we call resources. But these resources can be appraised and planned for only in their setting—their human setting and their physical setting. These resources are not just sheets of paper and figures—they are cherished by proud people with proud traditions, proud of the Nations they have created and proud of their scientific and cultural achievements.

We throughout the Americas are not just planning to hold onto the progress of the past—we are planning to go forward actively toward a better way of life for all of us. We have in this Hemisphere a vast area which presents limitless possibilities and staggering problems. We Americans of the South and North can realize all of those possibilities, if our common effort is directed to it wisely and well. If the campaign is well planned by all of us planners of the Americas and resolutely carried out, we can win a great victory for civilization and hold that victory and keep pressing forward—yes, even for two thousand years.

Cultural Coöperation

CARLOS CONTRERAS, Planning Consultant, Mexico, D. F.

I WOULD like to have you consider what I am going to say in the light of constructive suggestions related to the matter of cultural coöperation in the Western Hemisphere.

First, and among the most important things is the matter of language. We cannot expect to bring our peoples together if we begin by not understanding one another. I feel that Spanish should be taught in the schools of the United States as English is taught in our schools, and that it should be a prerequisite for ambassadors: ordinary, plenipotentiary, extraordinary or otherwise.

We should have more fellowships granted and a fuller exchange of students and professors. The Guggenheim Foundation has been doing this for several years throughout Latin America with a great deal of success, but we should extend these benefits even farther.

Means should be found to have lectures on our arts as well as on our social, administrative, economic and political problems delivered by competent people in the United States, and in the same manner to have these various aspects of life in the United States presented adequately throughout Latin America.

Films should be used as the means to bring about this cultural coöperation, from an educational point of view and also with the clear purpose of removing the objectionable characteristic features which tend to belittle us and to hurt us quite deeply. You can't imagine how we feel when we see ourselves pictured in the Hollywood films.

Border and traveling facilities should be extended to all our citizens. Passport requirements should be simplified to the utmost. I would like very much to see President Roosevelt and President Avila Camacho extend and address a circular letter to the citizens of Mexico and the United States similar to the one sent by Prime Minister Mackenzie King of Canada to the citizens of the United States inviting them to come to Canada, to cross the border without any passport formalities, to enter Canada as if it were their own house, and assuring them that they would be gladly received and cordially treated. This, it seems to me, would be a fine and helpful gesture. In addition we might continue the efforts begun by Messrs. Cammerer, in Washington, and Ingeniero de Quevedo, in Mexico, in close coöperation, to build an International Park, all along and on both sides of the Rio Grande, where the part on Mexican territory would be policed by citizens from the United States and the part on land of the United States by citizens from Mexico, and with the possibility of having our peoples enter and travel through these international park zones free and unmolested, for the pleasure and satisfaction of all.

I think we ought to—and I have been doing it for at least the past fifteen years—bring our neighbors into our homes and let them see how we live; share our table; our bread and salt; know our families—in short, become acquainted. I think this will prove very helpful in bringing us closer together.

I feel very seriously—and this is my own personal point of view, for I know that there are many people who think quite differently—that we should tend decisively to a careful avoidance of overindustrialization. I tell you quite frankly that I would much rather have tourists come to Mexico and pay four and five times what they should for our art pieces in ceramics, than to see these produced wholesale to be sold at Macy's. I do hope there will be a judicious restraint in overindustrializing Mexico. I refer to Mexico, but, although I have not been in South America, I feel that we may well apply these recommendations to all the countries in Latin America.

Although we know we need, and we do need, capital for the development and improvement of our countries, great care should be exercised by the United States not to make us feel too much the weight of its

economic pressure. This might easily destroy what we are trying to do.

Here I am going to touch upon a very delicate item and one which offers, undoubtedly, certain dangers; but I will try to express it as diplomatically as possible, allowing for the personal interpretation and conclusions of all those present. I should like to see a gradual, continuous, but final, elimination of political interference or intervention.

One of the surest and best ways to encourage cultural coöperation in the Western Hemisphere is by fostering much closer professional relations. One of the features of this program might well be the creation of a Continental or Pan American institute—a "Planning Institute of the Americas"—that would correlate and coördinate the planning problems from Canada to the Argentine. The seed of this movement may lie in the Bureau of Urban Research, to be installed at Princeton University under the direction of that very capable young planner, Melville Branch.

A very important thing that I must bring to your attention, which Mr. Lockwood brought out in a fine way in his very scholarly paper tonight, is the question of the preservation of our national characteristics, our local customs and traditions, our mode of living, our folklore, our arts, our monuments, and even our cooking. I can tell you that it is very sad to have you think that all we have to eat in Mexico is the "chili con carne," which probably was invented at the border, "enchiladas" and "tamales." This hurts our gastronomic feelings.

We must have an ample exchange of publications and a careful selection of translations in all fields.

Since our distinguished Chairman, Mr. Delano, has referred to the condition which existed not so many years ago of resentment here toward the "highhatting" attitude of the English, I should like to recall Mr. Nelson Rockefeller's experience in a South American country where the attitude of the American residents there, toward the citizens of that country, was of the same nature as that quoted by Mr. Delano and forced him to say to them that they seemed to be under the impression that the natives were the foreigners instead of the contrary being true. We, therefore, should eliminate these superiority and inferiority complexes.

We must have an understanding of the Latin mind, of our ways of thinking and feeling, of our sensitiveness and of our sensibilities, and likewise, of course, an understanding of the ways of thinking, feeling and acting of you people in the United States.

I am sure that if we put all these efforts on a basis of truth—even though it may hurt sometimes (I hope I may quote here St. John's: "And ye shall know the truth and the truth shall make you free."), of mutual respect and consideration, of a closer and more spiritual human understanding between our peoples, we will then accomplish our aim: a fine, broad, true cultural coöperation in the Western Hemisphere: the hope of the New World.

THE NATION

NATIONAL PLANNING

Economic Trends and National Land Policy

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IN THE critical period ahead we shall need to capitalize on all of the progress we have made in recent years in thought and action with respect to the physical, economic and human aspects of land-use. As we emerge from an expanding defense economy to our ultimate peace economy, it will be necessary to understand not only the use of land but to consider the use of land as an integral element in our social system.

Land policy has its setting in the broad framework of national economic and social policy; and a coördinated approach to the development of a national land policy requires a recognition and understanding of various basic trends affecting the whole economy.

The industrial depression checked the long-time downward trend in the rural-urban balance as measured by the ratio of farm to total population. These would normally have gone into urban centers to become consumers of farm products as an offset to declining foreign markets. The defense program is now reducing this surplus, but after the defense program it will be necessary to guard against their return to the land by providing peace-time non-farm opportunities.

The long-time regional shift in industrialization is being aided by the placement of defense contracts. The recent tendency for the Western and some Southern States to increase in relative importance is being accentuated. The defense contracts are sufficiently large to affect these regional shifts in industry, to induce accompanying shifts in population, in farm production, and in transportation needs; and to raise the multitude of problems of sound land-use, for this and later generations.

The long-time growth in the national debt, accentuated by the defense program, has a definite bearing on the post-defense prospects for national land policies. Post-defense planning with respect to both public and private land-use as a part of a national program to aid private industries in their efforts to sustain full employment could involve us again in a concern over Federal finances and unbalanced budgets. It will be helpful then, as it is now, to observe that interest charges on a rising national debt need be no more burdensome than they were in the 1920's if the national income rises to 100 billion dollars presently and continues to rise thereafter. With lower interest rates the burden could be less. We are entering an era in which the State must play a greater rôle as the agent (and not, as elsewhere, the master) of the people, in protecting their liberties from external aggression and

their farm, forest and mine resources from individualistic exploitation and mismanagement, in establishing greater economic security, and in providing for a gradually expanding standard of living for ourselves and our neighbors. For these purposes, our government will need a modernized system of Federal finances in which the acquisition of national assets to be amortized gradually will be distinguished from current governmental operating expenses.

Exports. The effect of the present war on exports of farm products has been to accentuate the decline that was on during the 1920's and 1930's. So far this season, before the Lend-Lease Bill went into effect, we exported in volume about one-third of what we exported during the second year of the first World War, and less than half of what we exported during the 1930's. Part of this decline took place before the present war broke out and gave us the problem of surplus acres during the 1930's. Cotton exports in the past two seasons have shrunk about 85 percent, tobacco about 70 percent, and fruits about 70 percent. Exports of wheat and pork products have dwindled to even less than the very low volume of the 1930's.

From the standpoint of farmers as a group, these facts mean that the 20 percent contribution that the foreign markets used to make to their annual income 40 years ago, or the 15 percent contribution during the 1920's, or the 10 percent during the early 1930's, is now no more than a 2 percent contribution, and that they must now depend, to the extent of 98 percent of their income, on the domestic markets. In terms of land, this shrinkage is the equivalent of about 40 million acres, chiefly in cotton, wheat and corn.

If the Allies win the war and we undertake to supply Europe with food, clothing and building materials during the period of postwar reconstruction, we shall need to expand our production temporarily and then to contract again to the long-time normal basis. The export factor thus poses serious problems of surplus acres and unemployed and under-employed rural manpower. To meet these, requires a national policy of land-use which is capable of rapid adaptation to the future.

Domestic consumption. Can the domestic markets be expected to absorb the products of 40 million acres formerly devoted to serving the export markets? In terms of the commodities involved, this question really means: Can the domestic market double its normal consumption of cotton, increase its consumption of wheat by one-third, increase the consumption of livestock products derived from corn by 10 percent, and the consumption of tobacco by 75 percent? Unfortunately, the domestic market for food products is not elastic enough to absorb these additional quantities without government action on the national level. Not even the current rising national income, and its prospective further advance, promises to offset entirely the loss of the export market.

The broad fact in the long- and short-time trends in per capita food

consumption is that for the country as a whole there is very little flexibility. In most years, excepting the first World War and drought years, we consume between 1830 and 1900 pounds of food per capita, and a high level of national income seems to affect the total very little. In terms of land, this has meant that we have required just about 2 acres per capita of harvested crops to supply our domestic needs.

In the case of cotton, the long-time upward trend in per capita consumption prior to 1914 has given way to a downward trend. During the past two or three decades, per capita cotton consumption has averaged about 27.5 pounds in good years, with a maximum of about 32 pounds in the war years of 1916 and 1917. Even if that high level of consumption could be maintained, it would mean an annual domestic use of 8 to 9 million bales, and this is only half of our cotton-producing capacity. Unless large-scale new uses for cotton are developed, or consumption greatly stimulated among low-income classes, the South is faced with a basic shift in land-use and in the occupation of at least a million of its farm people. The present program of inducing more diversified farming will need to be greatly increased, and appropriate educational steps taken to meet the natural (though not necessarily justified) fears of producers of livestock and livestock products in other areas. If the 20 million surplus cotton acres were diverted to food production, at the present rate of food consumption it would require the population growth of the next 10 years to provide a domestic outlet for the food products of those acres.

The possibilities of increased consumption are probably greatest among the low-income groups, where both lack of education and inadequate income are responsible for under-consumption The need for getting rid of national surpluses and for building up the health of the Nation as a vital matter of defense offer a national basis for programs of food distribution and food health and education. In the Food Stamp Plan of the Department of Agriculture we have an effective mechanism for increasing consumption among low-income groups, for it provides additional purchasing power to be used specifically for additional food consumption by low-income people; but such devices would have to be undertaken on a much larger scale if available productive capacity of land is to be fully utilized to supply only domestic consumption.

It has been suggested incidentally that the increased numbers in military service and more active work may bring about greater food consumption. The prospect here is very meager. Men in the army tend to consume about twice the national per capita quantities of certain foods, and if we apply this ratio to the entire army ration, 2 million men in military service would add about 1.5 percent to the total consumption of 132 million people, and 4 million would add only 3 percent.

Population. The problems of urban and rural land-use come together in terms of population. Too many people on the land and not enough in

our factories, mines and service occupations, characterized the depression years of the past decade. This is reflected in the fact that between 1930 and 1940 the working population on farms declined only from 21 percent of the national total to 20 percent and the total population on farms declined from 24 to only 23 percent of the national population, whereas in previous decades the average decline was fairly constant at about 5 percent. This difference of 4 points in the rate of urbanization may be taken as equivalent to about 2.5 million farm persons of working age and about 5 million farm persons of all ages. With 5 million persons fewer to share the annual return from farm production, the average standard of living on farms would be about 20 percent greater (provided this number were withdrawn proportionately from all income groups).

The Nation should take steps to guard against a back-to-the-farm movement when the peak of the defense program has been passed. Opportunities for employment in all industries after the defense program, with special emphasis on non-farm industries, must be planned now if land and human resources are not to be again exploited by poor people mining poor land.

Regional shifts in population and industrialization. The growth of our national industrial plant has not been uniform throughout the Nation. First one area, then another, took the lead in relatively rapid expansion. During the 30 years ending with about 1880, the growth of manufacturing industries in the Midwestern States exceeded the rate of growth of the Eastern States. During the last quarter of the 19th century, the Southern States took the lead in the rate of growth. Since then, a number of midwestern States and some of the Southern have grown industrially at about the same rate as the country as a whole, and several Western States (such as Minnesota, Kansas, Nebraska and Colorado) have actually failed to keep pace. Interestingly enough, these are the areas where population growth has also failed to keep pace, and during the past decade there has been an actual decline in population in these areas.

The States that have been leading in industrial expansion in recent decades, including the decade of the 1930's, are Texas, North Carolina, Tennessee, California and Michigan. Other States, such as Indiana and Louisiana, have also shown a more rapid rate of growth than the country as a whole, but not as rapid as those mentioned previously.

Defense contracts have been placed, so far, about in proportion to the regional distribution of industrial capacity, but there are some outstanding exceptions. Thus, in the Northeastern section of the country—north of Tennessee, North Carolina, and east of the Mississippi—we find something over 70 percent of the value of manufactures in 1939, and about 70 percent of defense contracts. In the two States, California and Washington, with only 6 percent of the value of manufactures,

about 18 percent of the defense contracts have been awarded; whereas 10 Southern States as a group with about 12 percent of the value of manufactures, have only about 7 percent of the war contracts. In all other States, chiefly the agricultural Middle West, contracts fall short in relation to their manufacturing capacity. In this group we find 9 percent of the value of manufactures and only 5 percent of the war contracts. If these proportions are maintained for the balance of defense contracts yet to be placed, the Pacific Coast will have its industrial trend accelerated in relation to the rest of the country, and the Middle West and South may not quite hold their own.

From the standpoint of surplus acres and surplus people in the Cotton States, it is unfortunate that less than its proportionate share of industrial expansion is going to the South. There are probably a million or more persons of working age associated with cotton production who should be absorbed into non-farming industries, and for this purpose a most vigorous growth of industries in the South would be most desirable. It should be possible to envision the probable impacts of a rapid rise of industry in the Far West on agricultural production for local instead of foreign markets, on rural and urban land requirements, on the balance between farms and forests, and on numerous other relationships between resources and the long-time human welfare.

It should be possible for governmental and private agencies to anticipate the consequences of or take steps to prevent a further absolute decline in population and a further relative decline in industrial activity in the Middle Western States.

The national debt. The steps that will need to be taken to sustain full employment beyond the defense program have not yet been developed. It is hoped that certain aspects of the rural conservation works program recently suggested by the U. S. Department of Agriculture will be included. The National Resources Planning Board has also recently made recommendations for the development of resources and stabilization of employment with special reference to land-use and public works and water and energy development policies. There have also been proposals for a rural housing program and for transcontinental highways for military and other purposes. If these broad programs of resource conservation and development are to be resorted to, major financial requirements will be involved and the Federal budget will need to play a major rôle.

It is in this connection that our recent data on the annual cost of carrying an increasing national debt become pertinent. We are no longer as concerned about government spending as we used to be. Not that we see our way clearly through the new debt structure that has been reared by the circumstances of the depression of the 1930's and the defense program, but we do see more clearly that the huge volume of Federal finances is but a feature of the tremendous world changes that

have transpired so rapidly in the past few years. Ten years ago we were frightened by the prospect of a Federal deficit of one or two billion dollars, when we saw only a 40 to 50 billion dollar national income. Now we are beginning to envision a national income of 100 billion dollars or more, and see more clearly the function of government funds in relation to the development of natural and human resources and to the preservation of our way of life.

It is not generally known that in spite of the greatly increased Federal debt, the debt burden for the Nation as a whole is lighter today than in 1929 or in fact than in any year since 1920. In 1929 we had a national income of 83 billion dollars and a total of government and private long-term debts of 116 billion dollars. Total interest charges, at an average rate of 5.4 percent, amounted to 6.2 billion dollars, or 7.5 percent of the national income. Today, the net public debt is larger than in 1929, long-term private debts smaller, and the total 139 billion compared with 116 in 1929, but interest rates are lower. The annual carrying charge now amounts to only 5.2 billion dollars, and with the national income already exceeding that of 1929, the interest burden is only about 6 percent of the national income. If interest rates are kept to their present levels and the national income goes to 100 billion dollars or more, it will be possible to carry a much larger national debt, and interest charges would represent no larger burden in relation to the Nation's capacity to pay than in the 1920's.

The new functions of the Federal budget to bring about desirable social objectives that otherwise would not be developed calls for modernizing our Federal bookkeeping. In business, the expenditures for long-term assets are not included as part of current expenses. Dealing with our natural resources in line with current concepts of conservation, development and human welfare, may call for expenditures that are in the nature of governmental and social assets and only maintenance costs would properly need to be covered by current government receipts and taxes. A Federal budget modeled more nearly after accepted business accounting practice will go a great way toward establishing in the public mind the true relation between national debt and the capacity of a Nation with an expanding national economy to meet annual carrying charges and, if desirable, gradual amortizations.

Some of that scope, with special reference to these human aspects of land-use, has recently been sketched out by the U. S. Department of Agriculture as a rural conservation works program. As a measure to provide employment and security for displaced and under-privileged people, the rural conservation works program was designed for immediate relief and rehabilitation as well as for long-range purposes. It is a program for putting the unemployed and underemployed in rural areas to work on the productive task of building up our greatly depleted soil, forest and water resources. It is in essence a device for

providing opportunities for rural people in building up their own resources for the good of themselves and the Nation. It is designed to accomplish the conservation of private lands and resources with government aid through loans and grants to whatever extent the benefits of soil building and conservation do not accrue primarily to individual property owners. Utilization of manpower in the development and conservation of private as well as public lands and resources offers a major possibility for expanding economic opportunity and should be a basic aspect of our national land policy in the period immediately ahead.

The general set of trends described above points to the probable necessity, in the years ahead, of increased public enterprise as well as increased guidance of an assistance to private enterprise, if the Nation's land resources are to be effectively used and economic opportunities on a high plane are to be provided.

Industrial Production for Defense

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WE are confronted today with one of the toughest jobs in American history. We stand united to defend the Western Hemisphere, and now that we are in the war, we shall all stand united on every land and every sea wherever our forces may lead us.

City planners, engineers, architects, landscape architects, municipal authorities, economists, charged as they are with the great responsibility of endeavoring to protect the health, decent housing, morale, safety, comfortable living, desire to home ownership, efficiency of our cities and towns, best development of our national resources, best use of land, stability of urban and rural values, and even the individual character of our cities, must and will first give consideration to the grave defense needs of the hour.

Our defense program, desperately behind in the beginning, slow in starting, is picking up enormous momentum, with an increase now of 600 percent in the manufacture of tanks, 300 percent in airplanes, 1,000 percent in powder, 1,200 percent in small arms ammunition, and, in fact, 15,000 percent in some armament items. Yet, these figures must be doubled, trebled or quadrupled.

Very recently we were spending annually some one-fourth of what Germany was spending in her armament program. (Remember Germany spent 100 billions before we even got started.) Today, we are making certain guns that will use $125,000 worth of ammunition per hour. A bombing plane costing more than $3,000,000, with a speed of over 400 miles an hour, cruising radius of 8,000 miles, carrying 40,000 pounds of bombs, is not the end of our aircraft progress.

Literally thousands of engineers, scientists, and research experts,

gathered from every university and laboratory in our land, are working feverishly day and night to improve every piece of equipment, to develop new articles, in fact, new knowledge in the whole range of our armament program. These men are straining every nerve to build equipment to combat every new invention that may be sprung by the Axis powers: these men are the spark plugs for the spirit of the Nation. If necessary, they can turn a factory making electric toasters into one making gas masks, or a factory making automobiles into one making the most intricate parts of airplanes.

Science is playing an important task in enabling the gunner to aim his shot two or three miles or more ahead of a distant plane or ship, taking into consideration the movement of the earth, the velocity of the wind, the magnetic pull, the temperature, and other factors entering into the aiming of instruments and use of optical equipment, a single piece of which may have taken years to grind, and which enable the gunner to direct a hit on an unseen object twenty-five miles or more away.

Items of chemical warfare, unknown a few months ago, and submarine equipment mark great achievements in our military progress. A tank weighing up to 70,000 pounds, with a speed of some 500 miles in 24 hours really is a moving fort. Battleships, destroyers, cruisers, mosquito torpedo boats are being built all around our coastline, involving the studies and skill of years by the able staff of our Navy.

An Army of 1,400,000 men is being thrown into camps, with living and fighting equipment of a superior character heretofore unknown in our land, the result of twenty years of careful planning by our Army.

The food for our Army and Navy today surpasses anything in our history. At 43c per man per day, hot fresh food is served, whether the men be in camp, in mobilization, in a bombing plane 25,000 feet in the air, a sailor in a submarine, or the soldier in tropical or subzero area—carefully balanced diet, some 5,000 calories per day—about five pounds of food per man. The grave danger of sickness, which in the Civil War took more lives than bullets, can largely be prevented.

Yes, the food is better perhaps than 60 percent of our people in the United States eat every day, and is building nerves, strength of endurance, and fighting spirit in our forces. You may be interested in the figures on food per day for our Army alone: 1,000,000 pounds of meat; 600,000 pounds of potatoes; 500,000 pounds of fresh fruit; 110,000 pounds of coffee; 125,000 pounds of butter; 700,000 quarts of milk, and so on down the line. Contrast the splendid preservation of our food by cold storage in ships, camps, air-bases and everywhere, with the brine salt beef, the dried fruits, and hardtack of early wars.

American ingenuity is ably developing substitutes for shortages in materials; for instance, synthetic rubber, magnesium of light weight, or some half-dozen substitutes for shirting material or for duck which

is used in a multitude of items, stronger, more comfortable shoes to to stand a march of 25 miles in a single day. Soldiers in the Army use on an average three and one-half pairs of shoes a year; but taking the shoes coming through factories, in transit to central depots, in distribution to cantonment, in cantonment depots, and shoes in use, we must have on hand or in the making about six pairs of shoes for every man. This applies relatively to many items of clothing and camp equipment.

Contrary to general belief, cavalry horses are still important; bred from the finest stallions which have been scattered throughout the country by the Quartermaster Department for years, we have today some 50,000 horses and mules, the finest ever known in our Army.

Surgical and hospital supplies, some 90 percent of which before the World War came from Germany, are one of the greatest needs and are being rapidly supplied.

Fire fighting equipment, with chemicals to combat types of fires heretofore unknown, is being studied day by day; bombs with an explosive power beyond the dreams of the World War. Yes, it is a struggle for supremacy in technique, a struggle between American leadership, not only in mass production, but in individual, brilliant, scientific achievement in the development of highly specialized pieces of equipment—the result of long research and brain power. In modern communication equipment, the intricate network of millions of miles of wires and powerful radios are almost weird in their elaborate bringing together of the maneuvers of our Army and our ships at sea.

All critical and strategic materials must be conserved in anticipation of stoppage of supply from foreign sources. Many priorities and possibly price controls to prevent a spiral inflation, regardless of impact on civilian uses, must be applied; and, wherever necessary, American industry and American labor must forget all interests except national defense. Now is no time for furtherance of undue profits or undue social gains. Today, every man, woman and child in America must think, act, and work for his country's life, make any sacrifice, meet every call or need and respond with the same spirit that in '76 made our country free.

I have said the above to you as planners—to make a background of our thinking. We *must* place defense needs first. What can we do to soften the impact on our plans of our cities and rural areas; our living costs; our patriotism; our unity; our solidarity; our national economic structure? All this gigantic program creates a multitude of problems.

Large, new defense plants may create great problems in traffic, utilities, and overload general municipal facilities, requiring your expert advice and help. Whole new communities of even fifty to seventy-five thousand population may be demanded over-night near defense plants. Shall these areas later become ghost towns, or may they be planned to relate to nearby cities or peacetime plants and serve a permanent use? C. F. Palmer, that competent Coördinator of Housing, is battling these

problems. A thirty-five-mile radius is adopted from which to draw employees. Careful surveys are conducted to ascertain the number of employed in an area already housed. Present vacant housing, including single rooms, is counted; ability of private builders to provide new housing is first calculated. Then and then only is necessary defense housing supplied from government funds.

Perhaps widened highways to more remote present houses can reduce the number of new homes needed. Perhaps the building of new houses somewhat removed from the plant may better fit into future needs of the community. Careful consideration of existing utilities, highways, schools, churches, shopping centers, playgrounds, etc., should influence the location of new housing and save large costs to be devoted to more insistent defense needs.

Can the placement of defense plant structures and permanent defense housing projects fit into the pattern of the cities' future growth? In this you can give valuable advice. Will defense housing projects fit into a community's fire or police protection service? At least 200,000 defense houses are needed now; perhaps another 200,000 next year. This presents grave problems.

Where defense housing will permanently remain, are we building our housing monotonously alike, destroying the personality and individuality of the home? Perhaps this cannot be avoided on account of costs. Are we building groups of housing—a target for bombing—or are we thinking of safety by scattered development?

Certainly wherever possible new housing outside city limits should be placed where some kind of county zoning or power of control exists. Or if no such power is in effect, any county having the legal authority should hasten to establish restraints to direct the best orderly development of defense areas, and particularly wayside developments.

Certainly this is no time for an emotional approach to our task. We must think of cold, hard facts; we must speed defense. But how can we make a terribly bad situation a little less bad? One part of our land should not be drained of its man-power and machines to overload already over-congested industrial areas, bringing enormous after-emergency losses, lowering of living standards and blighting our land with ghost towns.

Here is where the comprehensive studies of the National Resources Planning Board can be a fine, constructive guide and help to direct development to the best interest of the Nation as a whole. This Board plans and thinks nationally and only in the interst of our best use of all our resources for the greatest benefit of all our people.

It does not always entail a loss of time in the long run to plan our cantonments and sites for houses to save trees, to fit topography, to fit into a city or county plan and to relate them to existing traffic highways and public facilities. I view with alarm mushroom shoddy types of

wayside developments which may impinge themselves on our highways for generations. Can we avoid this menace? This speedy, forced type of building is hard to digest. Shall we lose many of our parks, playgrounds and recreational areas by unnecessary use for defense projects?

Certainly you should make every fair effort to help avoid the blocking of essential future extensions of a park, parkway, trafficway or playground.

In Washington, where for fifteen years I have been a member of the Planning Commission under your illustrious chairman, Frederic A. Delano, we are dangerously near losing the sacred governmental character of our city, a capital city worth fighting for.

In closing, I know that we have a fierce, rugged love of liberty, mightier than planes, tanks, guns: all of us crave to have a part in national defense. Every one of us, not delaying a single need of defense, will do our part at home to help direct the whole program in every possible way to the best preservation of our home life, the integrity of city plans, our over-all production facilities, a balanced national economy, the best uses of our resources—all in all—preserving our dear and cherished American way of life against which no foreign power can now or ever prevail.

Post-Emergency Planning

CHARLES E. MERRIAM, Vice-Chairman, National Resources Planning Board, Chicago, Ill.

ONE of the questions most commonly raised in America today, in fact everywhere, is "What is coming out of this terrific world struggle; what may we look forward to after the storm has died down?" In this competition for New Orders, what Order are we building here, or what do we strive to build?

Some of you will remember that President Wilson, as the end of the last war came near, proposed to set up a reconstruction commission to make the transition from a war economy. Many thought it was an excellent idea, but in the general excitement at the end Wilson dismissed the whole idea and said: "We have been working in the harness here. We will take the harness off and go back to ordinary conditions." That was translated by a gentleman named Harding, who became President of the United States, into "A Return to Normalcy." Well, we returned to normalcy, but with terrible results—without any preparation or attempt to break the shock.

The farmers out in my country were the first to be deflated. The farms in Iowa and Illinois went sour. The mortgages went sour and the farmers went sour and the banks went sour. Many thought, "You can still be very prosperous, even with all your agriculture deflated." Then we went through a merry-go-round until 1929 when finally the

whole thing collapsed—agriculture first, then industry. Then I need not remind you that in the course of five years, the national income dropped from an average of about $80 billion to around $40 billion. In the course of five years, we lost about $200 billion. Nobody knows precisely what the wealth of the United States is, but it is estimated, roughly, at about $400 billion. In other words, we lost in a period of deflation, about half the national wealth. Not only did we lose that in dollars, but in human discomfort, unemployment, distress, and despair on the part of many people; we lost incalculable amounts that never can be replaced.

In a real sense post-defense planning is a part of defense itself, for it is intimately related to morale, which, in the end, other things being equal, determines the issue of conflicts.

The NRPB has been asked by the President of the United States to draw together the various plans being developed by operating governmental and other agencies, to analyze them, and to make a picture of what might be achieved. Ultimate decisions must of course be the work of the policy-determining agencies of the Government. Dr. Luther Gulick has been put in charge as a coördinator and conductor of such plans for the NRPB. With the coöperation of the staff and other specialists within and without the Government, he has been actively engaged in this task for a number of months.

Without attempting too close an analysis of the many ramifications of this large undertaking, the following points may be set down as on the agenda of post-defense planning. A fundamental assumption underlying everything is that every possible effort must be made in advance to prevent another period of unemployment and industrial depression.

1. A statement of the bill of human rights emerging from modern conditions—which I sum up as a fair share of the gains of civilization for everyone, spelled out in the details of everyday life.

2. A careful analysis of our experience at the end of the World War, and of the plans now being evolved in England and other countries for the next post-war period.

3. An analysis of unemployment of army and civilian personnel, possibly arising at the end of a defense period, and development of the ways and mean of offsetting this demobilization of men.

4. The conversion of industries following a large-scale defense effort into peacetime industries, where possible.

5. Preparation of a shelf of works and activities in readiness for instant use without fatal delays for any period of unemployment or industrial regression. Substantial progress has been made already by the NRPB in Federal projects, and now a review of non-federal projects is being conducted by the FWA and the NRPB.

What are you going to do with the large centers which are developing

in this emergency period? There are 100,000 men slapped down here, 50,000 there, 25,000 there. What if the defense emergency should stop now? What would you do with those people in Charlestown and other centers where they are now working? What are you going to do with the buildings and structures which you set up? What are their uses, if any? What other uses, if any, can they be turned to? What are you going to do with the capital that has gone into defense projects when defense production has come to an end or tapered down rapidly? What are you going to do with agricultural products? You have another problem there: whether that is stepped up or down or laterally, I don't know. But we ought not to make again the mistake that we made before, and compel the farmer—who put in extra amount of wheat because he was going to get a large price, and because the people said food would win the war—to have his back broken because he couldn't foresee the difficulties we would get into, and out of which the government didn't move very rapidly to help him.

6. The conservation and development of urban areas with a view to ending urban slums or near slums is a matter of prime importance in the consideration of post-defense conditions. Mr. Charles Ascher has been placed in charge of the necessary inquiries and recommendations in this field. He will have the coöperation of a wide range of official and unofficial agencies with interest focusing in this field.

7. The outlook and prospects of Youth in the coming post-defense period is one of the most significant issues before us. In a sense, as in the case of Urbanism, this reaches a cross section of modern civilization. Much work has already been done by public and private agencies which can be fitted into a general program of activities. Dr. Floyd Reeves has been asked to take charge of these inquiries and recommendations, using the results of the labors of the American Youth Commission, and the Federal and other agencies concerned with this problem.

8. Equal access to minimum security on the basis of long-time policy for the Nation.

9. Means of securing the fullest coöperation of labor, industry, and agriculture in the development of an appropriate program of activities. Obviously, the task of preventing an industrial landslide is not the task of government alone; but involves the earnest consideration and cooperation of the several branches of industry concerned.

10. Methods of financing such governmental or other steps as may be essential to stem the tide of primary importance. If defense expenditure reaches, as it well may, thirty billion dollars a year, and then drops suddenly down, how shall we bridge the vast gap? On this critical question the assistance of Dr. Alvin Hansen of Harvard, an eminent authority in this field, and of the Federal Reserve Bank has been sought, along with the counsel of other competent technicians in this field.

There are, I suppose, those who are cynically minded and say nothing can be done because you don't know when the time will come or what the nature of the crisis will be. My answer is that a good general staff ought to be able to look ahead at a variety of situations, and give you alternative plans which will be useful. Which of those would be adopted, if any, or what compromise would be made, or what the final assessment would be, is a political decision to be made by the President and by Congress, and not by any planning board. The planning board, as a general staff, ought to be ready with useful suggestions.

This is not merely a matter for the NRPB, but for the state planning boards and for regional planning boards and for local planning boards, because this is not a task that can be done in Washington alone. It has to come clear down to the grass roots. It is not a task that can be performed by government alone, but will require coöperation of government and industry.

This is our mandate, and you can say "God have mercy on your souls," but we are in a position of having to make a preliminary try. We will see what we can produce that will be useful to the President and the powers that be in Washington. In the planning and programming of labor, the NRPB solicits the aid and counsel of all citizens and organizations and agencies willing to join with us in this admittedly difficult task. We want your help.

Industrial Location and National Policy

GLENN E. McLAUGHLIN, Chief, Industrial Locations Section, National Resources Planning Board, Washington, D. C.

PLANT location decisions play an important part in the development of the Nation's resources, in the stabilization of employment and production, and in the equalization of standards of living among regions. Significant also are the investment of public funds in facilities for making defense materials and in the necessary public services which must often be provided in conjunction with those facilities. Because of its concern with these matters and because of its interest in the long-range development of resources, the NRPB is currently engaged in an industrial location study, including an analysis of the geographic distribution of economic activity and an effort to develop criteria for the attainment of a healthy distribution of industry with a minimum of trial and error experimentation. Public as well as private welfare would be promoted by avoiding the mistaken location of industrial plants, mistakes which often tend to perpetuate the inefficient use of resources.

Although many of the general features of our locational pattern were shaped during the 19th century when our economy was in the early stages of industrialization, it is fallacious to assume that the pattern is now fixed and inflexible. On the contrary, changes in the distribution

of industrial activity are going on constantly as a result of differential rates of growths, actual relocations, abandonment of old plants, development of new plants, and idleness of existing plants. The decade of the 30's, for example, witnessed the migration of the aircraft industries to southern California, the partial delocalization of the rubber tire industry from Akron to Los Angeles, Detroit, and new production centers in the South, and an increasingly marked shift of the textile industry from New England to the South.

Changes which have occurred since 1900 suggest that the location of industries has become less dependent on markets and sources of materials and more dependent on production organization, pricing patterns, financial control, and governmental policy. This trend is especially significant in that it reflects the advanced stage of our economy.

We can no longer look forward to the opening of vast underdeveloped regions of the country. Consequently, a more selective and economical use of resources is now imperative. This requires improved production techniques and social guidance of economic activity, including the fostering of an economically and socially desirable distribution of industry.

In reviewing alternative sites for industrial plants, business management must base its choice primarily on studies of comparative costs of production and distribution. Insofar as these analyses result in an economic use of resources, including manpower as well as material resources, there is *prima facie* evidence that they are socially desirable. Insofar as they fall short of this goal, it is the responsibility of government to temper these decisions with proper consideration for social as well as economic costs.

Thus, it is properly within the province of government to appraise the needs of regions for additional industrial employment and then in one way or another to stimulate industrial development in those regions. The policy which the government may follow will vary from industry to industry and from area to area, but, in all cases, it must take account of the existing locational patterns for particular industries. Some industries are distributed in much the same way as population; some are found mainly in cities, others in the country; some are localized in concentrations of their own; still others are linked locally with allied industries. While policy need not perpetuate the existing locational pattern for a particular industry, wisdom suggests that the point of departure be a recognition of this pattern and of recent changes in the pattern. Logically, in deriving a policy concerning the location of economic activity, government must seek within the limits of efficient operations to achieve the broad objectives of our society—a well rounded development of the Nation's resources, lessening of the fluctuations in employment and production, and equalization of living standards

among regions. Obviously, industries with peculiar production and marketing requirements must operate in those communities and areas where these requirements can be met adequately. For a few industries, effective production zones are very limited and hence government can exercise little influence in directing the expansion of these industries in economically weak regions of the Nation. In other industries—and surely a greater number today than a generation ago—productive capacity can be located over a wide range of States and with only minor variations in production and distribution costs. Moreover, during the period of strenuous rearmament, defense plants may in some cases be located without reference to regional differences in cost. Speed of production, protection of plant, and avoidance of local congestion become more important considerations. Yet despite considerable scattering throughout the country, new defense productive facilities have been concentrated in the Northeastern quarter of the country primarily because of the element of speed, and also in part because of lack of planning.

Programs through which an improved distribution of industry can be achieved include: (1) urbanization; (2) ruralization; (3) suburbanization; (4) delocalization; (5) dispersion; and (6) diversification. The broad question of public policy is to determine which of these objectives singly or in combination will be most effective in promoting industrial efficiency, rising standards of living, and desirable inter-regional relationships.

While the past has witnessed a trend toward urbanization of industry and population, there is no implication that the extension of this trend is desirable or inevitable. The rôle which governmental policy may play in influencing future trends will depend on a careful weighing of the following considerations: the economic characteristics of each industry including production requirements, efficient size of plant, and relations to other industries; the size of community under consideration; the economic structure of the region and community; the relation between social needs and economic costs; and the time required to effect modifications of locational patterns.

Some industries are restricted in their location to narrowly defined zones, whereas others are free to locate over a wide zone. Only the latter are to any important degree subject to social direction. But even for this group of industries, there are certain limiting factors. Size of community, for example, may set an upper limit to the size of plant which can be established, although richness of local resources may allow considerable growth. Furthermore, the industrial complexion of the region or community in part defines the kinds of additional industry which would be locally helpful. Thus, if the purpose is to diversify productive activity, a heavy industrial area would appear an appropriate place for consumer industries, unless certain local economic characteristics were unfavorable.

A community or region seeking to balance its economy must possess

the economic factors necessary for the success of new industries. On the other hand, social considerations will indicate which types of activity should be avoided, even though they can be profitably developed. As a matter of fact, if a concern has to bear its full share of local social costs its management may follow somewhat different locational policies.

Naturally, no blanket recommendation for decentralization away from large population centers can be made. Large cities are best equipped to accommodate some industries, especially those requiring certain labor skills, a variety of industrial supplies, and specialized marketing agencies. Consumer industries and industries in which external economies are important must continue to reside where population and a variety of industry are clustered. In industries of this sort many comparatively small producing units need to be located near each other in order to command the services of specialized concerns in furnishing service of one type or another. Moreover, some large cities are in need of certain forms of light manufacturing in order to check the deterioration of central sections of the city.

A program of suburbanization offers, among other things, a means of offsetting the costs of congestion. Where plant units are large and employ great masses of workers, or where plant operations are of a nuisance or hazard nature, industries should be influenced to locate on the peripheries of cities.

Further industrialization of medium-sized cities should be guided by the need for balance between general types of activity. Dependence on one industry and particularly on one plant should be avoided in order to minimize the risk of secular, cyclical, seasonal unemployment. Diversification, then, is an especially appropriate program for medium-sized cities, because it is much less likely to develop without conscious direction there than in large cities.

Caution should be exercised in measures to attract industry to small towns and rural areas. If a small town becomes dependent on a single industry, it is important that the industry be a stable one because of the lack of offsets to fluctuations. Moreover, wherever possible, industrial activity should be integrated with existing farming or other extractive activity; for example, industries which operate seasonally may offer an opportunity to those workers who derive an inadequate income from non-industrial, part-time pursuits.

Government policy in the field of industrial location must operate usually within rather narrow limits. Government, moreover, must necessarily give careful consideration to the bearing of social needs or costs on the industry.

While the latitude of social policy is thus restricted, means of implementation are more or less unlimited. Tax policy, price regulation, labor legislation, and credit control are all potentially effective weapons which the Federal Government may wield in its efforts to promote the

development of a national, integrated locational structure. In this same way States and localities may also be instrumental in guiding shifts in the locational pattern.

In normal times, instances of direct manipulation of the location pattern by government are rare. In peacetime, influences of this nature are confined to the operation of public works, the postal system, and public power developments. Indirect influences, on the other hand, are numerous. In an emergency when production of great quantities of material is required on short notice, it is incumbent on government to play the leading rôle in direct action. In the current defense effort, therefore, the location of new defense plants and of expansions of existing facilities has been dictated, in the main, by the Federal Government. Yet there has been little opportunity to distribute the new facilities in accordance with social needs; the impelling consideration has been to achieve production quickly. The end result has been to add new activity on already congested areas, to give additional identical activity to one-industry communities, and in general to retrogress from, rather than to make progress toward, a better distribution of industrial activity. The price of this lack of planning will be a heavy one.

We must, therefore, look forward to an increased need for a coordinated national locational policy. The problems of communities will be especially acute when the pace of rearmament slackens, and it will be incumbent upon government to play an increasingly important rôle in guiding the Nation's progress toward a healthier pattern of economic activity.

How the Business Man Locates Industry

DONALD COMER, Chairman of the Board, Avondale Mills, Birmingham, Alabama

I COME from Alabama, an agricultural section, and I am so sure that our interests would be best served by some reasonable mixing of industry with agriculture, that I would like to talk about industrial location in relation to this philosophy. I present this philosophy with the thought that as it will benefit a particular section, so it will indirectly benefit all sections.

The Honorable Chester C. Davis, now President of the Federal Reserve Bank of St. Louis, and until recently a member of a national defense advisory commission, representing agriculture, in a speech in New Orleans, March 15, 1941, said:

> Full adjustment and full balance in the Southern economies will not come until a part of the agricultural population has found an effective and useful employment through Southern industrial expansion. This is the great step which is necessary if the South is to become a strong and effective part of our national economy.

Localities seeking industrial investments certainly have made a study of how the business man locates industry. What such localities

say about their advantages is therefore of interest. They speak of healthful conditions, transportation service, power, water, climate, raw products and of course available workers. They speak of treatment that has been accorded established industry within the area. I quote a letter written November 12, 1940, to Governor Dixon from the head of a business that started in Alabama in 1927.

> We are happy to say that our judgment in selecting Alabama as a location for our plant, which normally employs 700, has been justified by actual experience of the last twelve years.
>
> We have found Alabama labor ready and willing, coöperative, easily trained, and, when trained, as efficient as and fully equal to that in other sections of the country where we have operated.
>
> We are right in the center of an abundant supply of raw material, electric power, and coal, all of which are readily available at reasonable prices. There are also many advantages due to climatic conditions of the State. Being responsible for the management of our Company, there is one point that I would like to press, for I think it would be an important factor for the executives who carry similar responsibilities, viz: the friendly attitude of local citizens, and their willingness to coöperate in every way, as well as their appreciation of the right kind of industries. This same attitude carries through to the State Government, which is very friendly to industry.
>
> Another thing which may be of interest to executives is the fact that we have found the tax authorities, both local and state, fair and reasonable and showing a spirit of encouragement to industries.
>
> We have always been sold on Alabama as a location for our industry and are glad to extend a welcoming hand to others looking for a location for a new plant, or an addition to their present facilities.

This gentleman is a satisfied customer; he mentions tax treatment.

Certain sections of the country, particularly my own, have been criticized because, in order to induce industry to establish itself locally, exemption of certain taxes for a period has been offered. I am not sure myself of the wisdom of such offers. I have availed myself of some such offers at times, and at other times I have declined to accept the offer. It seems though, that criticism for this effort of the rural areas to establish industry within the neighborhood, close enough to furnish work for its farm boys and girls, and so hold them near home, should not come from the old industrial sections of the country. If the community, city, county or State is willing to exempt some industry from certain taxes; is willing to bear some proportionate slight increase in taxes in order to provide the public service required by the newcomer while he gets established, that is its own affair. As I said above, criticism for this particular program should not come from the old industrial sections because they had their beginning behind a tariff mechanism which required all the consumers in the whole country to pay a tariff tax in order that they might be established.

Many years ago I heard this definition of industry, which seems to me illuminating:

> The function of industry is to take certain things that grow on the surface of the earth or buried beneath the surface, and convert them into sizes, shapes and colors that the public wants; and to do that at the least possible cost without any exploitation along the route.

I realize that such an interpretation of industry represents a very high ideal. Industry represents an investment of money: dollars that have been saved up by one or more individuals. While these dollars are seeking an investment with a chance to earn something, they are terribly interested in security. In this respect they are no different from people, and just as people want to be employed and secure in their employment, so these dollars want to earn and want security.

There is evidence of this fact around us everywhere today. Investment in government bonds offers the greatest security for our dollars, and so every offering of government loans, anywhere from ½ of 1 percent for short time loans up to 2½ percent for long time loans, are over-subscribed many times. The security in 2 percent postal loans attracts millions of our savings—dollars that want to be secure are willing to take a very low return.

The men who direct industry form a cross section of our people; they are more or less selfish, just as are men in other groups. I was recently trying to work out a profit-sharing plan, and I used the expression "men hiring money instead of money hiring men" and then I ran into a copy of a speech made by Owen D. Young at Harvard, June 4, 1927, from which I quote:

> Perhaps some day we may be able to organize the human beings engaged in a particular undertaking so that they truly will be the employer buying capital as a commodity in the market at the lowest price. It will be necessary for them to provide an adequate guaranty fund in order to buy their capital at all. If that is realized, the human beings will then be entitled to all the profits over the cost of capital. I hope the day may come when these great business organizations will truly belong to the men who are giving their lives and their efforts to them, I care not in what capacity. Then they will use capital truly as a tool and they will be all interested in working it to the highest economic advantage. Then an idle machine will mean to every man in the plant who sees it an unproductive charge against himself. Then every piece of material not in motion will mean to the man who sees it an unproductive charge against himself. Then we shall have zest in labor, provided the leadership is competent and the division fair. Then we shall dispose, once and for all, of the charge that in industry organizations are autocratic and not democratic. Then we shall have all the opportunities for a cultural wage which business can provide. Then, in a word, men will be as free in coöperative undertakings, and subject only to the same limitations and chances, as men in individual businesses. Then we shall have no hired men. That objective may be a long way off, but it is worthy to engage the research and efforts of the Harvard School of Business.

If business had to come to exploit the natural resources and the people, accompanied by industrial discords, we had better remain agricultural and work out our salvation along that line; but I have faith that we are going to find ways for better and better industrial relations, something approaching the ideal expressed by Owen D. Young.

Business at best is very precarious and dollars invested in business are very insecure. I have heard figures quoted from Dun & Bradstreet to show that out of every 100 people who go into business, after the first five years only 5 percent of them remain. Billions of our savings invested in business are lost.

It is natural that business, therefore, in seeking location, looks for

the place that promises it *first* the best chance for security and *then* profits. Since business operates under government license, since it lives under many regulatory laws and under the constant direction and supervision of many Government bureaus and departments, it naturally would seek a location where it might expect tenderest consideration. Where business sees a department of the Federal Government—like I.C.C.—by its regulations of transportation charges favoring a particular section and area, business would naturally look for location there. Business would naturally consider first a location with a view to availability of raw products as well as nearness to the largest group of consumers—that is, minimum time and cost of delivery to the largest number of consumers.

There are two philosophies today in this country in connection with the location of industry. The first is to keep industry, and expanding industry, where it is and bring our population increase to that area. The second is to let industry expand in rural areas where employment is now most inadequate, and where there is the greatest increase, by birth, in our population.

As a result of the former philosophy, Southern clay will go North to be manufactured into chinaware; Southern hardwood will go North to be manufactured into step-ladders; Southern steel will go North to be manufactured into machines and machine tools. And as these Southern raw products are shipped across our borders to the North and East, Southern young people must and do follow right along so as to have a part in their fabricating and processing in Northern and Eastern plants.

A study in Georgia showed that between 1920 and 1930 over 350,000 young people left the State because there was no place in the Georgia farm economy for their services and brains. Georgia estimated that caring for these young people had cost the State over a billion dollars.

During the same decade it was estimated that Alabama lost 200,000 of her young people. The location of expanding defense industry right at this time has focused the nation's attention on this question. I would like to quote here a Resolution adopted on August 30, 1940 by representatives of nine States—Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Kansas, Missouri, Arkansas and Oklahoma—in conference at Kansas City, Missouri:

> The representatives of the nine States and the more than 200 communities here assembled pledge their unqualified support to the national defense program and their loyalty to the common welfare of our country.
>
> Yet these States and communities are determined that, while they stand united for defense, the program shall not become the occasion for a social and economic tragedy for this region.
>
> For these States and communities cannot but view with genuine concern the social and economic consequences of this program—necessary as it is—if in its operation it is not to be thoroughly and justly decentralized and spread over the Nation.
>
> This nine-state-area, while it has found great basic strength in agriculture, has suffered

peculiarly because of the lack of an essential balance between industry and agriculture and the shutting off of markets for its products.

This process has been going on for years; and now, with a sudden and tremendous expansion of industrial expenditures by the Government we can see an industrial set up in other areas of the country which would throw this territory more out of balance than ever.

These nine States and their hundreds of communities are resolved that they are not going to be reduced to a position of agricultural slavery.

This great middle western area is already seeing the new process at work, seeing its raw materials and its skilled labor and its great untapped reservoirs of farm boys—the very lifeblood on which the territory must depend in years to come—drained off into other sections for their further enrichment.

These States and their communities take the position that it is not enough to be for a decentralization of industry in principle.

The Middle West insists that in the spending of the billions, and in the allocation of new industries, decentralization shall become a fact, in processing and manufacturing, and that this area shall receive its just and proper share of the outlays of public funds.

This is not a cry for 'pork.' It is the voice of the Middle West asking for justice, for that to which it is clearly entitled, giving each man and woman, insofar as possible, a particular job to do so that all may be busy and all will feel they have a part in the defense of America.

This conference was for the purpose of urging the decentralization of industry where the Government itself was *locating* industries for defense needs. This involves, of course, the spending of tax money, and naturally everyone in the country has an interest in how tax money is spent for financing and locating industry.

If the argument used here for the location of industry in rural areas is sound, then it seems to me the same argument can be used for the location of expanding private industry in rural areas, nearer to raw products and nearer to a large group of consumers, who heretofore have seen not only their raw products drained away but their young people drained away also, with their own needs for the finished product handicapped by double freight charges.

The Bureau of Agricultural Economics in a late bulletin quoted farm wages in Southern States—in Georgia 85 cents per day and in Alabama 90 cents per day, both without board.

Everybody knows of the tremendous effort that is being made by our Federal Government to increase farm income—equal reward for equal effort whether urban or rural—and that result is going to be accomplished one way or another. Naturally it would seem that this increasing agricultural purchasing power would attract the location of some industry that would manufacture products for the use of this particular group of consumers. Naturally an industry serving this purpose would want to locate within the area of its market. As the unemployed farm population finds employment in nearby industry, three things happen. A 90 cents per day farm hand finds employment in the textile industry, at a minimum of 37½ cents per hour. This creates nearby purchasing power for diversified farm products which helps the farmer, creates purchasing power for some of the luxury and semi-luxury things made in other areas, and keeps the men near their homes.

Vice-President Wallace in his book *New Frontiers* painted an idealistic picture of this. I quote:

> Many of the most lively intimate expressions of spirit spring from the joyous, continuous contact of human beings with a particular locality. They feel the age-long spirit of this valley or that hill with its trees and rocks and special tricks of weather, as the seasons unfold in their endless charm. If life can be made secure in each community and if the rewards of the different communities are distributed justly, there will flower in every community not only those who attain joy in daily, productive work well done, but also those who paint and sing and tell stories with a flavor peculiar to their own valley, well loved hill or broad prairie. And so we think of coöperative communities not merely in a competent commercial sense but also from the standpoint of people who are helping unfold each other's lives in terms of the physical locality and tradition of which they are a part.
>
> In this way every community can become something distinctly precious in its own right. Children will not try to escape as they grow up. They will look ahead to the possibility of enriching the traditions of their ancestors. They will feel it is a privilege to learn to live with the soil and the neighbors of their fathers.
>
> Such communities will be strung like many colored beads on the thread of the Nation and the varied strings of beads will be the glory of the world.
>
> The pettiness of small communities will disappear as their economic disadvantages disappear. The people of small communities, rid of the pettiness which grows of economic fear, will be free to realize that community success may be truly measured only in terms of contribution to the spirit of world unity even though political and economic ties may be very loose.

But industrial success is not altogether one of location—there is a man, a vision, a faith. Roger Babson says:

> The real credit for most of the things we have is due to some human soul which supplied the faith that is the mainspring of every enterprise. Furthermore, in most instances this human soul owes this germ of faith to some little country church with a white steeple and old-fashioned furnishings.

The National Association of Manufacturers is sponsoring joint meetings of their members with church leaders. These meetings are being held all over the country, and plans have been made for such groups to meet in every community, as far as possible. I have accepted the Chairmanship for Alabama. As business expands, establishes itself and progresses, we are constantly reminded that all progress must be spiritual.

A small boy was saying his prayers at his mother's knees. "God bless Papa, Mama, little brother and sister, and please, God, be sure to take care of Yourself, for without You, we will all be sunk."

Industrial Locations for War and Peace—TVA Experience

JAMES P. POPE, Director, Tennessee Valley Authority, Knoxville, Tennessee

IT HAS been said that war and depression are ill, misshapen twins of disaster. When the war is over, war industries subside, hundreds of thousands of war workers lose their jobs, and other hundreds of thousands, even millions, of soldiers return to civil life. There are idle war plants, excess capacity in peacetime factories, and greatly reduced

governmental expenditures. So widespread is the economic distress among the people that the entire economic structure is threatened. This is the sort of situation which threatens the American people following this war.

Muscle Shoals Experience. As you know, the TVA had its immediate beginnings in the fact that during the first World War a site in the Tennessee Valley—Muscle Shoals, Alabama—was found by the Federal Government to be one of the most advantageous for a large plant to produce ammonium nitrate, one of the basic ingredients of high explosives. Serious consideration was given at that time to the most suitable locations for such plants; they had to be well inland for safety from attack, yet required good transportation facilities to obtain certain raw materials and to send their products to the explosives factories of the East. It is significant that of nine locations recommended at that time eight were in the Tennessee Valley and the ninth not far away.

Soon after the establishment of the TVA in 1933, a portion of this World War nitrate plant at Muscle Shoals was converted to the peacetime production of concentrated phosphate fertilizer—an essential element in the restoration and maintenance of the soil. But the possibility of this conversion, let me emphasize, was not a factor in determining the location of the plant. It happened, however, that the plant was located in a section of the country needing additional industries, with a population needing employment, and with natural resources awaiting industrial development. It was located in a region where there were substantial deposits of phosphate, where there was electric power and bituminous coal for processing it, where the soil desperately needed phosphate, and where a change from a one-crop economy to diversified crops was sorely needed. All this made the conversion of the munitions plant to a fertilizer plant a logical and highly important step in the development of the economy of the region.

So valuable to the farmers is this phosphate fertilizer plant that it is now being increased in capacity from 100,000 to 150,000 tons. At the same time the remaining portion of the old nitrate plant at Muscle Shoals is being modernized for the production of ammonium nitrate for explosives. It can be operated after the war emergency for the production of additional fertilizer materials, in ever-increasing demand.

Not only the use of the phosphate and nitrate plants, but the use of Wilson Dam and the steam plant illustrate the way in which wartime productive facilities may be converted for peacetime use. Other significant examples of successful conversion are the change of the powder plant at Old Hickory, Tennessee, to the production of rayon; and the industrial development at Kingsport, Tennessee, which was in part the outgrowth of a small wartime wood-acetate plant.

Decentralizing War Industries. Summed up, for what one experience is worth—but at least it is a real first-hand experience and not untested

philosophy—TVA experience indicates that although it is very desirable to anticipate the conversion of a factory as a guide in its location, this is not absolutely essential. Granting the priority of military considerations, the important step is to distribute the defense industries throughout the country in areas which need additional industries, which have available potential industrial employees already located and already served with housing and other essential community facilities, and which have natural resources of potential value to industry.

I should like to emphasize at this point that the elimination of the unjust burden placed upon the South and West by interterritorial freight-rate differentials is necessary to facilitate the successful conversion of defense industries in these areas to peacetime uses. Given a widespread distribution of defense industries throughout the country, the chances of utilizing a majority of them for peacetime uses are vastly improved. It is easier to find a combination of needs and resources for an industry in a locality not already highly industrialized than it is for a whole group of wartime industries in a small region whose industrial potentialities have already been largely developed.

The conclusions resulting from the TVA'S observations on an experience extending from one period of national emergency to another are exactly in line with observation of ten months' experience by the National Defense Commission. "On the sites which are selected (for defense production)," the Defense Commission said, "depends not only the strategic security of our defense industries and much of their efficiency for defense production but also important and permanent consequences for the economic life of different parts of the Nation. Experience gained during the past ten months would indicate that the immediate ends of national defense are largely consistent with the longer-run objective of a better balanced industrial economy." The Commission urged that "every possible preference be given to locations . . . where industrialization during the defense period will contribute to a better long-run balance between industry and agriculture. These conditions are particularly acute in many areas of the South and West."

Research. The TVA is continuously exploring possibilities for developing and utilizing the region's natural resources for peacetime as well as wartime needs. Its multi-purpose dams are adding hundreds of thousands of kilowatts of electric power capacity which will be available for the peacetime purposes of aluminum production, continuing chemical and fertilizer manufacture, and the products of hundreds of decentralized plants throughout the Valley. TVA research has developed in the laboratory a process, now being tested in the pilot-plant stage, for obtaining alumina, the raw material of aluminum, from certain clays which are widely distributed in the United States. In approximately the same state is the TVA development of the processing of olivine, a plentiful native mineral from which may be obtained

the essential mineral magnesium. And there is a promising project under way for the processing of flax in cotton mill machinery for making of parachute webbing for war purposes and for making attractive clothing fabrics for peacetime use. These are examples of the kinds of exploration that may be useful in converting wartime plants to peacetime uses. Other regions, communities, and individual businesses in the United States should similarly be carrying on industrial research in order that they may be ready to avail themselves of peacetime industrial opportunities provided by the decentralized wartime industries.

It is important to anticipate here the objection that non-industrial regions cannot hope to secure a decentralization of industry or successfully to convert defense industries to peacetime uses because they lack skilled labor. But I should like to point out that at the present time all regions are short of skilled labor and in peacetimes the agricultural originated labor of the South and West is apparently no bar to industry, for industries in Akron, Detroit, Pittsburgh, and other cities import such workmen in great numbers and train them in the plant. The crux of the whole matter is that you do not get skilled labor in a community without skilled work in which to train it, and that where the skilled work is available the skill of labor will rise to meet it.

Housing. It is necessary, of course, to provide a large amount of housing even with the largest possible amount of decentralization of wartime industries. Some of this housing may eliminate a long-existing community deficiency and be required by the community when peace returns. In some communities, the housing provided for war workers may constitute a surplus, all of which will not be required at that location regardless of successful conversion of war industries to peacetime uses. If left in that community, the houses will remain vacant and create a "ghost-town." If torn down and destroyed, valuable housing that is needed elsewhere will have been wasted.

All the houses that we can build during the emergency—and many more—are needed for the decent rehousing of America. The difficulty is that the houses will not be 100 percent properly located to serve peacetime requirements. The problem is likely to be particularly acute at sites of military camps, and at powder plants and other types of industries which will require drastic conversion to peacetime needs, and will therefore require some time for conversion.

Remountable Houses. To help solve these problems, the TVA has developed a remountable house which can be readily redistributed to meet the needs of the peacetime distribution of population. This is the second of the TVA accomplishments—the new one—which I should like to tell you about because it may simplify problems of industrial location for both war and peace.

The TVA remountable house is built on a production line in a factory.

It is entirely completed in the factory including exterior and interior finish, plumbing and electrical wiring and equipment including such items as bathroom fixtures, electric hot water heater, electric range and refrigerator. Even electric light bulbs and electric razor plugs are put in. In fact, about everything is included but pictures on the walls and jam in the pantry.

The houses are built in four or five units, or slices, each about seven by twenty-two feet, which can be loaded on a truck, transported over highways without special permits, placed on a waiting foundation, and bolted together to form the completed house. Four workmen can assemble the sections into a completed cottage within four hours. As soon as the outside sewer, water, and electric connections are made, the house is ready for occupancy. The house can be unbolted and removed to a new location with equal ease. The TVA is now engaged in building 150 of these houses for the Federal Works Administrator at Muscle Shoals and others are in prospect.

The usefulness of this house is obvious. It can be easily moved wherever it is most needed—to other towns, or to surrounding agricultural areas to replace substandard rural housing. It permits a high salvage of defense housing. It is permanent in character and equal or superior to standard frame construction. Its demountability is simply an extra feature secured without additional cost. In fact, there is reason to believe that industrialized house building will result in substantially lower costs.

So I conclude that the experience of the TVA is a worthwhile contribution toward the solution of the problem of conversion of wartime industry to peacetime uses. It points directly toward the wisdom of widespread industrial locations closely related to incompletely employed population and incompletely developed natural resources. All our efforts must be to make our economic system function adequately both during times of war and of peace if our democratic form of government is to serve the needs of the American people.

Programming Public Works

FRANK W. HERRING, Assistant Director, National Resources Planning Board, Washington, D. C.

IN MODERN society, the need for physical plant goes far beyond anything that would have been imagined in earlier years. We have made for ourselves the world's most complete network of transportation routes—waterways, railways, airways, highways, and city streets; we have made the "desert blossom like the rose" through great structures husbanding the waters of semi-arid regions; we have protected our most fertile lands from devastation by flood; we have harnessed the roaring waters to provide power for our factories and our homes;

by modern water supply and sewage disposal systems we have virtually eradicated many of the communicable diseases that in an older world periodically decimated city population; we communicate our thoughts to one another with the speed of light; we have our stadia, our national parks, our playgrounds and other facilities for the recreation of the human spirit.

The construction of public works is not something which came into being when we were faced with the unemployment crisis a decade or so ago. The construction of public works will certainly not come to an end when we have fought our way completely out of the depression. The defense program which is now the central point of our governmental activity is itself making new and even greater demands upon our resources to provide fixed plant in the form of power facilities, highways, housing and new armament factories themselves.

Although the necessity for work relief is decreasing as employment under the defense program rises, the people of our country are still far from fully employed; there are many depressed areas which the defense program has so far touched but lightly. However, our principal national goal is no longer that of finding something for hands to do; it is now that of finding hands to do the work which is so badly needed. The amount of construction activity to be undertaken in the United States this year will probably equal and possibly surpass that of the peak construction year of its history, 1927, somewhere around eleven billion dollars.

Programming for Employment Stabilization. The use of public construction for the creation of employment has a long history. Before the Civil War, New York City could have been observed improving Central Park and building new streets in response to the demand that work be provided for the unemployed during the winter of 1857–1858. Boston in 1875 provided jobs for its needy unemployed by putting them to work on grading its streets. Milwaukee in 1894 hired a large group of unemployed men to make street improvements that had been contemplated but never begun. In 1914–1915 more than 50 cities resorted to some form of public construction operation for the relief of unemployment.

In later years, proposals had been made by legislators, business men, publicists, and economists that the downswing of the business cycle be subjected to some degree of control of public construction activity.

During the 73d Session of Congress, Senator Wagner introduced a bill which after some modification was passed in February, 1931, as the Employment Stabilization Act. That act declares that it is "the policy of Congress to arrange the construction of public works so far as practicable in such manner as will assist in the stabilization of industry and employment through the proper timing of such construction,

and that to further this object there shall be advance planning, including preparation of detailed construction plans, of public works by the construction agencies and the board."

The central idea of the act is the adjustment of the *timing* of the Federal Government's normal public works program so as to bring about the maximum rate of expenditure at a time when employment otherwise is low and a minimum rate of expenditure when employment otherwise is high. The act does not place any emphasis upon the undertaking during depressions, of public improvements designed specifically for employment creation purposes. Neither does it contemplate the use of Federal funds to increase the amount of construction work undertaken during depressions by State and local governments. But the legislators of 1931 could not know the depths to which employment and level of American business could fall.

The amount of unemployment we experienced during 1932, 1933 and 1934 was many times more than could possibly have been compensated for by merely building ahead of schedule the Federal Government's normal public improvements. Consequently, steps had to be taken which were far more drastic than had been contemplated a few years earlier. Inasmuch as normally the preponderance of public construction in the United States is undertaken by States and local governments rather than by the Federal Government, grants-in-aid came to be a major reliance of the efforts formulated during the summer of 1933. Since that time both the grant-in-aid and the scope of the Federal Government's own activities in construction have been considerably extended. The construction of many projects was anticipated. In addition many projects were actually thought up for employment creation purposes, projects which probably would not have appeared upon a normal public works program.

In meeting the unemployment problem through public works we have done two things. We have adjusted the timing of the normal program so as to achieve as much compensation as possible in the direction of employment stabilization but we have also undertaken many projects, and have spent several billion dollars in so doing, for the primary purpose of creating employment itself.

How shall we use public works in the future so as to achieve a maximum of unemployment stabilization? It is my hope and it is one of the principal objectives of the NRPB, that in whatever we do we shall take into account the lessons we have learned during the past decade. We shall do our best to undertake those projects which will give a maximum of return in social benefit and community utility. We shall do our utmost to bring about an adjustment between the construction of those projects and the skills of the people we shall call to work upon them. We shall be prepared in advance, with adequately prepared plans, for the things we ought to do. We shall make such financial arrange-

ments as will minimize the reduction in the expenditure of State and local construction funds.

The achievement of those aims calls for a continuing public works planning effort, not a temporary burst of speed at any one time. If we want to be assured that there are a number of projects ready to go when we want them we must at all times be about a year ahead on our plan and specification preparation. This requires special financing, in many instances special authority. If we want to be confident that our financial arrangements are of the proper sort the necessary coördination of Federal and non-Federal financial resources must be made on a continuing basis. If we want to be certain that the most important projects will be the ones to be undertaken and that sheer busy work will be minimized, we must be prepared at all times to know what projects the city or the State or the Nation most needs.

Public works programming, therefore, must become a continuing administrative operation if it is to be of most usefulness. No one can foretell with any accuracy the time at which the business cycle curve is to take a sharp dip downward. At least our present knowledge does not permit such a forecast. We must be prepared at all times.

It is upon such a programming effort that the NRPB has been focusing its attention. In connection with the Federal Government's own program the procedure is becoming imbedded in the administrative processes. And, administrative processes benefit greatly thereby. The programming procedures that have been developed for States and cities are likewise designed to influence continuously the local government administration. In the Federal Government the programming operation has demonstrated its usefulness and is likely to continue irrespective of the Nation's adventures with business cycle phenomena. From the number of States and cities which have begun programming their public works over a long term we have learned that the operation is of such benefit to them that there too it is likely to remain as a normal administrative procedure.

Progress of Agricultural Planning

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EARLY in the development of extension work, which in a natural way starts with the passage of the Smith-Lever Act in 1914, state extension directors began encouraging the county extention agencies to develop extension programs based upon the needs and efficiencies of those aspects of agriculture which were involved in extension work.

In the winter of 1919 Secretary of Agriculture Houston ordered a general departmental reorganization in respect to land. In line with this reorganization it was proposed to set up a number of divisions,

one of which was to devote its attention to land. As one result, the Division of Land Economics was created. Under Dr. L. C. Gray, this division undertook a series of thorough investigations into land utilization.

This work bore fruit in a number of studies, among which might be mentioned one devoted to the land boom in Iowa, Kentucky, and other States; the inadequacy of the farm credit law, as then constituted, as a means of facilitating purchase of land by tenants; and studies resulting in a bulletin on the landlord-tenant contract, which has gone through many new editions and still is in active demand.

In 1922 a departmental committee on land utilization was appointed by Secretary Henry C. Wallace. The report of this committee, published in the Agricultural Yearbook for 1923, gave a new direction to national thought about the relation of supply of land to prospective requirements. Calling attention to the downward trend of population and presenting an inventory of available land resources, the report emphasized the relative abundance of land for prospective arable requirements. It then went ahead to emphasize the importance of a wise and careful use of resources of extremely varied character, and the need for economic and social adjustments in the use of land; adjustments that required land inventory and land classification as an essential foundation.

An interesting example of how the planning work of this period "carried over" into later work is provided by this report of the land utilization committee. For its points of view and methodology were subsequently followed by Dr. O. E. Baker of the Bureau of Agricultural Economics, and by a committee on national planning organized by Frederic A. Delano.

Another step forward in agricultural planning was taken in those years with the publication of a book entitled "What About the Year 2000?" The original manuscript was prepared as early as the fall and winter of 1928. It represented the thinking of a group of pioneers in the field of land-use. Prepared under the direction of the Joint Committee on Bases of Sound Land Policy, the book attempted to make an estimate of the land resources of the United States and to try to forecast the principal surface uses of land for a predicted future population by the year 1950 and the year 2000. The two questions it attempted to answer still concern us greatly today. The first asked whether "our land area in the United States will meet the demands of our future population?" and the second, "How are we to determine the best use of our land resources?"

The next step in the progress of agricultural planning came with the National Conference on Land Utilization held in Chicago in November 1931. At that time, you may recall, there was quite a bit of talk about reducing the agricultural surplus by the simple method of eliminating

submarginal lands. The idea was claimed to be perfectly sound and analagous to a manufacturer "scrapping" his least efficient plant, in order to curtail production. One political party put a "plank" in its platform advocating this plan.

The Division of Land Economics did not take at all kindly to this theory; its men were convinced that the retirement of submarginal land must rest mainly on a different basis from that of surplus control. Nils Olsen, therefore, interested Secretary Hyde in the subject of land utilization, and as a result the Secretary called the Chicago Conference, putting Olsen and Dr. Gray in charge of the arrangements. The conference demonstrated the existence of a latent interest in the problems of land utilization and aroused a notable amount of enthusiasm. Two national committees were set up, one on land-use planning and another on land-use legislation.

At approximately this same time the Social Science Research Council issued a publication entitled "Scope and Method Bulletin on Research in Agricultural Land Utilization." This bulletin recognized two phases in land utilization research—an applied phase, "analysis with a view to determining what and how land resources may be most economically employed," and a pure science phase, "an attempt to explain existing uses of land and to develop a body of principles related thereto."

In 1932 Hon. Victor Christgau introduced a bill to provide for regional and national agricultural planning boards to plan agricultural adjustments. Mr. Christgau had been a graduate student in agricultural economics under John D. Black at the University of Minnesota, and incorporated in his bill a number of adjustment and planning ideas which are now in operation.

By the spring of 1934 the program planning division of the AAA was actively engaged in planning work that was at least to some extent based on the agricultural planning research of the preceding years. The land policy section of the program planning division dealt mainly with a land purchasing program designed to eliminate farming on land unsuitable for that purpose, and to shift the land to the use for which it was best suited. Before long, the land policy section began to option and acquire a considerable amount of land.

Under the original AAA the program planning division was mainly concerned with agricultural planning in relation to the administrative phase of reducing the acreage of farm crops. One of its main objectives was to fit the AAA program to the individual farm without losing sight of the over-all objective of the program.

In 1935 the division was working on a regional agricultural adjustment program in an attempt to discover the extent to which the price adjustment objectives of the AAA program could be accomplished through attaining the adjustments needed to conserve the physical resources of the land. Emphasis on such conservation of physical resources

by the AAA was intensified following the invalidation of the original AAA act by the Supreme Court. Under the Soil Conservation and Domestic Allotment Act, plans were carried further for adjustments in relationship to the soil conservation program.

One of the most striking planning activities of the AAA was its cooperation with the Extension Service in setting up county planning committees made up of farmers. These committees worked out concrete, locally applicable plans for preserving the fertility of the land.

In 1937 the AAA began its experimental county program. Its purpose was to test alternatives to the regular AAA program and to indicate those procedures which would make the program more effective in obtaining soil conservation and an economic use of the land. Nine such programs were developed by or with farmers, and administered in 1937; nine in 1938; and eight in 1939.

To go back a little, I should like to refer to the work of the National Resources Board in 1933 and 1934. Of particular importance was the work of the Land Planning Committee of the Board, which may be said to be the culmination of 10 years' work on the part of those men and women interested in land utilization. It gave a new direction to national thought about the relation of supply of land to prospective requirements. The Nation was the unit of study, and the method included inventorying the resources in terms of adaptability to use, and forecasting population trends, dietary habits, and technological changes.

Until the report of the Resources Board, concern in these studies was almost wholly with agricultural land. Not until late in the decade did anyone begin to develop a way of balancing against each other the various factors involved not only in forestry and agriculture, but also in such matters as recreation and suburban and other uses of rural lands. The recommendations were presented under four separate categories: (1) Necessity for continuous planning; (2) needed changes in use; (3) reclamation policies; (4) operating policies.

During the first years of the New Deal there were, of course, many different land utilization research and land-use planning activities other than those of the National Resources Board and the AAA.

In 1938 occurred a great forward step in agricultural planning and in democratic policy-making within agriculture—the beginning of the county land-use planning program. I say "great" advisedly, because this was not simply the launching of another planning program. This program was based on a radically different concept of the entire planning process.

The importance of the county land-use planning program lies in the fact that it is based on a three-way coöperative planning process involving the technician, the administrator, and the farmer. To understand the significance of this it is necessary to remember that the land-use planning work of the previous years had been, with two notable ex-

ceptions, the product of technicians, of experts. These exceptions were the AAA's farmer planning committees, which gave a major place to farmer representation, and Wisconsin's studies of land-use and planning for zoning, which were carried out pretty largely through farmer meetings, township by township.

The need for expansion in the democratic base of agricultural planning and policy-making was accompanied by other pressing needs, which had grown out of the emergency situation in agriculture. The new national programs for direct action in helping farmers solve their problems of acreage control, conservation, rehabilitation, credit, and relief, because they were carried on by separate agencies, tended at times to operate independently of each other. A certain amount of overlapping and confusion in their operations when they reached the farm was inevitable. There was need, therefore, for coördination of the activities of these agencies.

These programs were established on a national scale. Yet, in actual operation in the field, each program had to be fitted as closely as possible to the needs of thousands of separate localities. There was a necessity for some kind of organized procedure through which local conditions and local judgments could be taken into account in shaping the operations and policies of the new agencies.

Still another problem arose because these programs of direct action were new. Adequate procedures and demarcations of responsibility had to be developed between the Department of Agriculture and the States to cover the new functions of Federal assistance that had been assigned to the Department by Congress. It is no exaggeration to say that the new activities of the Department called for Federal responsibilities and procedures that were drastically different from those which the Department and the States had experienced in the past.

To meet the need for coördination of Department activities, the Secretary of Agriculture on July 12, 1937, ordered the establishment of the Office of Land-Use Coördination with the aim of achieving better administrative coördination between the various programs carried on by the Department.

Under the leadership of Milton S. Eisenhower, this office was given the task of directing the coördination of land-use activities, as they related to the work of the Department. This work included the integration of land policies and the clearance of land acquisition projects, the establishment of uniform standards for surveys relating to land-use, and the correlation of survey projects. Through the work of Mr. Eisenhower and his assistants, a great part of the coördination problem in the field of national and state policies and programs in agriculture has been met.

Nevertheless, out in the counties and on the farms, a different type of coördination between the programs was still needed—local coördina-

tion. The need for fitting the programs as closely as possible to local needs remained. And still there was the knotty problem of clarifying the relationships between the Department and the States with regard to their joint operations in connection with the new agencies of the Department.

Agricultural leaders, both in the Department and in the States, in looking at these problems, had come to feel by 1938 that programs would be obtainable only if the agricultural specialists, program administrators, and farmers did this planning together on a coöperative basis. The knowledge of farmers about local needs and conditions was a vital ingredient in successful planning.

Such early efforts, however, had not furnished the answers to two important questions: (1) How can the technical experts and the farmers be brought together so that they may pool their information and arrive at common judgments, in order to guide the various public programs properly? (2) How can farmers make the fullest use of these public programs in solving their own farm management problems?

For almost 5 years the Department of Agriculture and the agricultural colleges and experiment stations wrestled with these two questions, realizing that new planning procedures were clearly needed to answer them. As an outcome of their efforts they agreed, in July 1938, on a method of program planning that promised to assure farmers a greater voice in planning the application of public programs to their local situations. This agreement was signed at Mount Weather, Va., in the form of an understanding between the land-grant colleges and the Department of Agriculture. It was agreed at this Mount Weather meeting that the Department and the land-grant colleges, through the Extension Services, would help farmers set up community and county agricultural land-use planning committees in each county.

The part played by the local planning committees is the heart of the agreement. These groups study local farm problems, and then, in the light of their findings, develop for their areas sound land-use plans that will guide the several national programs into a unified program best suited to promote the specific agricultural adjustments needed in their communities. Since national public farm programs are involved, official representatives as well as farmers take part in this planning work.

Active coöperation of the Department in the new planning process was essential. Therefore, the Secretary of Agriculture on October 6, 1938, ordered a reorganization in which he established the Bureau of Agricultural Economics as the Department's central planning agency. An Interbureau Coördinating Committee and an Agricultural Program Board were also established. The Interbureau Coördinating Committee was given the job of reviewing appropriate recommendations adopted by local and State Land-Use Planning Committees. When necessary, these recommendations could then be transmitted to the Agricultural Program Board. This Board was composed of the chiefs of the bureaus and

agencies of the Department, with the Secretary of Agriculture as Chairman.

During 1940 these committees were active in 1,540 counties, and the number has grown since then. Reports of activities of these groups show that they have concerned themselves with a wide range of subjects affecting rural welfare. In addition, they offered counsel on state and local legislation and administrative policy, on the adaptation of state and Department programs to local conditions, on measures to facilitate coördination of agricultural programs, and possible achievements through coöperative undertakings, and on orientation of educational programs.

Since these counties represent every type of farming area in the country, and face almost every conceivable kind of farm problem, the problems and work in each county vary widely. In all of them, however, the planning committee is working to meet the specific needs of the county.

These planning committees were set up during peacetime with the aim of accomplishing agricultural planning for peacetime needs. The framework of the organization, however, was established with the aim of providing for a continuous planning within agriculture. Through the planning organization, it was believed, agriculture would be provided with machinery for planning on a continuous basis for the adjustments that are continually proving necessary to meet changing conditions in agriculture and in the economy as a whole. It is not surprising, therefore, that the land-use planning committees are proving well adapted to the development of plans related to the present defense emergency. Agriculture's share in the national defense is tremendously important, both for the present and for the future. Naturally a wide variety of adjustments in agriculture are being called for as result of the present emergency, and it is probable that many more adjustments will be necessary as an outgrowth of the War.

A tremendously significant aspect of the contribution of planning committees to planning in the present emergency is the work recently undertaken by the State land-use planning committees, at request of Claude R. Wickard, Secretary of Agriculture. Throughout the Nation today, these state committees are developing preliminary answers to three major questions asked by the Secretary. These questions are: (1) How can agriculture contribute its share to general preparedness and national unity? (2) How can agriculture utilize the benefits resulting from the defense program to bring about the adjustments needed in farming, forestry, and rural living, and thereby place the whole agricultural industry in a much stronger economic and social position? (3) How can the unfavorable effects of the war and defense activities upon agriculture be held to a minimum without sacrificing or interfering with national efforts toward preparedness?

These are the broad questions being referred to the planning committees. Working through subcommittees, which have been appointed to consider the principal state problems arising out of the war, the state committees are now developing recommendations as to the needs of their areas on the matters of health, education, nutrition, marketing, transportation, taxation, land-use, production, and other questions.

The efforts of state land-use planning committees and of county and community land-use planning committees at this time are being aimed at the rapid development of a unified state program to meet the impacts of war. The full range of their activities in connection with defense may accurately be placed under this heading. The scope of the work they are undertaking, of course, is very great, because the effects of the war and defense activities upon agriculture are great. The drastic curtailment of export markets for agricultural products, which has occurred since the outbreak of the War, translates itself into terms of family incomes and living conditions on millions of American farms. The same can be said, on the other side, with relation to the expansion in purchasing power and consumption power of our people here in America, which is resulting from employment in defense industries and related activities.

The speed-up in industrial activity and in military training has once more opened up opportunities for rural youth to find employment in the cities, or in other non-agricultural pursuits. It can reasonably be expected that a considerable part of the surplus farm population will thus be drawn into non-farm work. Indeed, in some areas there is already resulting a shortage in the farm labor supply because of the migration of workers to cities. An additional effect of the war upon agriculture has been an increase in the demand for dairy, vegetable, and fruit crops with correspondingly better prices on all crops chiefly consumed in the domestic market. Some improvement in the agricultural export situation also seems in store for us as a result of food exports to Britain under the lend-lease policy.

Land-use planning committees, state colleges of agriculture, and the Department of Agriculture are jointly concerned in mapping out the adjustments now needed.

Looking ahead to the day when defense activities slacken and a possible tide of migration back to the land begins, these groups are formulating recommendations as to policies and activities that are needed now and in the future to improve rural housing conditions. They are talking about methods of improving tenure arrangements, so that farm families can use their land resources to increase their economic security, give them a greater stake in the welfare of the Nation, and contribute to improved uses of agricultural resources.

At the root of these discussions is a recognition that, in spite of the shift of agricultural workers into other industries, there is likely to be, for some time to come, a large proportion of low-income farm people

who will have to remain on farms. Planning committees are deeply concerned with the need for arriving at measures for affording these people better opportunities in agriculture. To this end they are discussing new land utilization, forest restoration, and rural works conservation programs. They are thinking of fertilizer needs, and of the possibilities inherent in major decentralization of industry.

In view of the possibility for future large-scale unemployment, at the conclusion of the defense emergency, thought is being given to new types of assistance in guiding workers from areas of low opportunity into areas where opportunities are better. Recommendations are being formulated for specific types of assistance to low-income farm people, which will enable them to improve their farming operations so as to take advantage of the increased domestic demand for some kinds of agricultural products. The possibilities of coöperative marketing, forest management, industrial uses of agricultural products, shifts in production, and added conservation are being studied. Full attention also is being given to the problems bound up in the question of Pan American trade relations, and for the harmonizing of urban and agricultural interests during the troublous times in front of us.

Many state planning boards are carrying on activities related to and tied in with the kind of agricultural planning that I have just described. In many instances the chairman of the state land-use planning committee is the agricultural member of the state planning board. The land committee of the National Resources Planning Board, under the able leadership of W. Meyers, Cornell University, has preserved many valuable studies and is performing a great service to all.

The farmers of this country, through land-use planning, are, in truth, already working for the total defense of America. It is an important work. Planning of this character has a vast and immediate usefulness to the Nation in time of peril and it blazes a trail for a future in which the major emphasis shall lie upon the maintenance of a sound and prosperous agriculture for the greatest number of people.

Agricultural Land Planning from the Federal Point of View

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THE organization and process of land-use planning are characterized by a high degree of vertical integration which permits the effective two-way flow of proposals and ideas between one end of the planning structure in Washington and the States, counties, communities and farm homes at the other end. From the Federal point of view, this process has some very practical meanings. At a time when national unity is imperative, it provides a means for greater unification of

national and local interests in the field of agriculture. It promotes better adaptation of public agricultural programs to local conditions and needs, and provides a basis for more effective coördination of the operations of various Federal and state agencies. The planning process increases the probability that national plans and programs for agriculture will rest upon the solid footing which the combined judgment of farmers and others who are close to conditions throughout the country can provide.

Obviously, the treatment of many land problems is more dependent upon national planning than on local or even regional planning. Recognition of the need for conserving our soil resources has led to the formulation of a broad Federal program of conservation in which a half dozen or more of the agencies of the Department of Agriculture participate in coöperation with state and local governments and with farmers. The national question of agricultural population distribution in relation to land resources cannot be settled locally. It requires the formulation of national plans for inter-regional shifts in farm production, and for shifting less productive lands from agricultural use to grazing, forestry and other types of uses. Even the number of people receiving employment in agriculture and the degree of commercialization of farming are being influenced by national policies growing out of land planning at the Federal level.

National agricultural land planning must deal with the problem of agriculture's rôle in the national economy, which means that it must be oriented to domestic and export requirements for agricultural products. It must establish national production goals for the more important commodities. Agriculture is vitally affected, also, by the general level of employment, and by the level of industrial production. If employment is high, not only are there fewer excess workers seeking employment in agricultural areas or engaging in subsistence farming, but the effective demand for the products of our farms is greater. Agriculture, therefore, is concerned with Federal policies affecting the volume of industrial production and nonagricultural employment.

An essential raw material of national agricultural planning is supplied by planning committees in the States and counties. The recommendations of these committees permit the development of national plans in the light of State and local attitudes on national issues. Land-use planning committees in the States are making notable progress at the present time in helping the Department of Agriculture work out desirable major shifts in national agricultural programs to meet the impacts of the war. They are giving particular attention to ways of minimizing the unfavorable effects of the war and defense activities upon agriculture while enabling agriculture to contribute its share to national preparedness and unity. It is recognized that the defense program will present many opportunities to bring about needed ad-

justments in farming, forestry and rural living. Plans are being developed, therefore, with the assistance of State Land-Use Planning Committees, which will enable agriculture to take advantage of every opportunity presented by the defense program to strengthen its economic and social position. In anticipation of large-scale unemployment at some time after the war, one of the next tasks of state and county committees is to help the Department, and through it the National Resources Planning Board, build a reservoir of rural works projects that can be readily put into operation at the appropriate time.

Planning in the States and counties is the vehicle by which broad national agricultural plans are brought down to earth and adapted, as they must be, to local conditions. Included in the scope of such planning are the determination of the location of lands which should be shifted from farming to other use, decisions as to the types of conservational and farming practices which are most effective in bringing about the better land use, the location of roads, water facilities and flood control projects, the delineation of problem areas requiring special types of programs, the coördination of effort required to achieve the most effective local operation of Federal and state programs.

This broad social and geographical scope of agricultural land planning from the Federal point of view inevitably implies the necessity of harmonizing conflicts of interest which arise between agriculture and the rest of the economy, within agriculture between various geographical sections of the country, and between agricultural groups on the different rungs of the agricultural ladder.

The natural desire of farmers to receive higher prices for their products may and often does conflict with the interests of processors, distributors and consumers. Examples of this type of conflict come readily to mind. Proposals have been made for the imposition of severe limitations upon the output of various crops. Pushed to extremes, these proposals would have worked unjustifiable hardships upon the consumers of various types of agricultural products. Occasionally, the interests of certain types of farmers may be adversely affected to a limited extent by the operation of reciprocal trade agreements, in spite of the fact that most farmers and the public generally stand to gain much more than enough to counterbalance losses to small minorities.

The current defense emergency is throwing into sharp focus the increasing necessity for curtailment in the production of certain export crops. This country has suffered the effects of a downward trend in agricultural exports for nearly four decades and all indications are that the long-time trend is still downward. From a national point of view, curtailment in the production of export crops should be accomplished by shifting land from the production of export crops to the production of other cultivated crops, as well as to forest and pasture

uses. Yet these shifts will unquestionably operate to diminish the relative importance of some of our midwestern States as sources of supply for pork, dairy and poultry products, and certain minor crops such as soybeans. The problem of harmonizing the interests of farmers in different sections of the country is simple compared with that of developing a national agricultural program to serve equally the interests of consumers, industrial workers and farmers. In the absence of direct representation of nonagricultural groups in the agricultural planning process, it is incumbent upon the Department of Agriculture to give consideration to these groups, just as it is incumbent upon other Departments of the Federal Government to give consideration to agriculture when they are planning activities that vitally affect agriculture. This may involve the adoption of Federal policies that do not always meet with the approval or concurrence of state and local agricultural land planning committees.

Still another type of national, as well as local, problem in the development of agricultural land-use programs is that of harmonizing the interests of landlord and tenant, small and large farmers, employers of farm wage labor and their hired hands. The farmer membership of state and county land-use planning committees is drawn too largely from the ranks of the more prosperous farmers and landowners, particularly in areas where small farmers, tenants, sharecroppers, and farm laborers comprise a heavy majority of the agricultural population.

This is not to imply that the present membership of State and county land-use planning committees is not genuinely and keenly interested in the welfare of the disadvantaged elements in the agricultural population. But from the Federal point of view, the formulation of plans without participation of part of the people for whose benefit they are made is not all that might be desired in a democratic process. The Department of Agriculture, as a participant in land planning, encourages and supports measures designed to improve the status of the "forgotten men" of agriculture.

You may ask: What has social security to do with agricultural land planning from the federal point of view? The answer is that any national land-use planning that fails to take into account the economic status of the people who work on the land is either planning in a vacuum or planning for only a part of the people. To be sure, it could be decided that, from the viewpoint of landowners, a given land area is suitable for agriculture if it can be operated with peon labor, or on a seasonal basis without any regard for the well-being of the workers during periods of unemployment. The same land, considered from a more civilized or social point of view, might be classified as unsuitable for agriculture. Thus, the Federal point of view is the social point of view; and agricultural land-use, from the social point of view, is as broad as the whole field of political economy.

Fiscal Policy for Financing Defense and Permanent Public Improvements

J. WELDON JONES, Assistant Director, Fiscal Division, Bureau of the Budget, Washington, D. C.

PLANS if they are good enough and meet the needs of the actual situation carry their own propaganda and their own power to organize, so that no dictatorial power is necessary to bring about their fulfillment. Only when the plans are bad is dictatorial execution necessary. And plans are bad when they are related to objectives alien to the people upon whose coöperation the execution of the plans depend. Those who dislike planning believe that planning implies regimentation and they dislike regimentation. If that be true, then it is especially urgent to explore those types of planning which imply a minimum of regimentation,—to search for the significant controls,—to look for the shifts in emphasis that must be made,—and then to have what planners have perhaps lacked most, those evangels who prepare the way and set the tempo for the inevitable change. I find in fiscal policy the ingredients for just such planning.

Fiscal policy for financing defense has always been discussed in terms of equity and economic repercussions. Only recently have we recognized that financial policy can be used as an instrument of planning,—planning for the effective ulitization of the national resources. It seems to be significant that the President said in his Budget Message of last January:

> The fiscal policy outlined here would be in accord with our objective of financing the defense program in an equitable manner, facilitating full use of our national resources, and avoiding inflationary policies which would aggravate the problems of post-defense adjustment.

Facilitating full use of the productive forces by the methods of financing,—that is a daring thought indeed. Financial policies, the power to destroy, used as a power to create!

If we had financed the defense effort from the very beginning by drastic taxation on a pay-as-you-go basis, (for example, by a general sales tax) then we probably would have diverted productive resources from civilian to military use. We would have maintained our army of unemployed, we would have kept factories idle and the standard of living low. This not only would have been harmful from the point of view of public morale but also it would have undermined the productivity of labor and managerial efficiency. These elements remain our heavy artillery—the greatest assets we have in our arsenal of democracy. Actually we financed most of our effort by borrowing and by an increase in the yield of our progressive taxes. By borrowing at this particular time, we facilitated a fuller use of our productive resources.

MAIN

If we look with a certain degree of satisfaction upon these results of defense financing in the first year we should not forget that the real test still lies before us. During the first period of the defense effort we have had to fight serious bottlenecks in specific defense industries. In the general field of consumers' goods, increased demand has been matched by increasing production. There are, however, symptoms visible which seem to indicate that we are entering now a second phase in which substantial expansion still is possible but at a slower pace because more frictions must be overcome. At the same time defense spending can be expected to increase to record heights. The purchasing power generated by government deficit spending and maybe also by wage increases may outrun the simultaneous increase in the supply of goods, a situation which must lead to price rises,—unless purchasing power is absorbed by an increase in saving and taxation. This is a situation which calls not only for measures of price regulation but also for substantially increasing taxes and an increasing ratio of the expenditures met by taxes. In this second stage, it is essential to keep the total increase in purchasing power within bounds of increasing production, and it may become necessary to direct the use of purchasing power.

If, on the other hand, large unused capacities of farm production are available some channelizing of expenditure by stimulation of food consumption should be considered. At least no taxes should be imposed on food consumption. Again, fiscal policy is a means of directing consumption with a minimum of regimentation.

There may come a third stage in the defense effort in which practically all productive forces will be used. Further expansion then depends largely on the mobilization of the labor reserve on farms and in kitchen and the transfer of labor from less to more urgent work. That is a period in which consumption must be not only limited but also trenched, and in which fiscal policy must be increasingly supplemented by all kinds of regulation and regimentation. In that third period it is essential to increase the "propensity to save" by persuasion or compulsion and to increase taxation still further. This would be a total all-out effort.

Such a program is what I would like to call planning by the use of fiscal policy. It requires great flexibility of our legislative and administrative techniques and even greater flexibility of our minds. It requires better methods for an accurate appraisal of the available labor reserve and available facilities. It requires in general less dogmas and tabus and more the spirit of social engineering in our whole process of budget making.

What has been said for defense periods applies equally for peacetime. I cannot imagine the American people, having learned of the tremendous potentialities of their productive forces, ever again per-

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mitting millions of men and a large portion of machines to be idle. I do not suggest that all defense problems can be solved by fiscal policy and I do not suggest that full and steady employment of a peace economy can be accomplished by means of fiscal policy. I am convinced, however, that a planned fiscal policy must play an essential part both in a defense and a peacetime economy. I am also convinced that the more effective we are in our fiscal planning, the less we shall need regimentation.

Fiscal policy is the most effective instrument for directing the expansion of total purchasing power. By directing expansion total demand is directed. And no stimulation of production is as effective as the one which creates demand—continuous, steady demand for goods and services. By this kind of planning it is possible to influence production and investment with the least interference to management.

In a period of extraordinary rearmament, financing is the main area of operation for fiscal policy. Non-defense expenditures can be curtailed. But many of the so-called non-defense expenditures have an important, even if indirect, relationship to defense. We can and must economize in these areas, but we should move with great discrimination. During such times, we must "fire both barrels" on the expenditure side but have a care that we do not waste ammunition. Expenditures will be limited only by our capacity to produce. During such times, obviously, the strategic moves in fiscal policy must take place on the side of financing.

In a peace economy both sides of the ledger are of equal variability for a planned fiscal policy. On the expenditure side a flexible policy of planned public works should be applied. In this respect the experiences of the last decade should be fully analyzed and we should learn from our past. The main problem which has not been solved is the interrelationship between Federal, state and local public works programs. Most of the Federal works effort of the past did not compensate for the decline in private construction,—too often it merely offset the decline in state and local activities. Effective public works should aim not only at disbursing money to the lower third of our population but at creating opportunities for them to increase their productivity. Public improvements planned in such a way deal with the causes rather than the symptoms.

Technical durability should not be decisive in directing public efforts. Decisions should be made upon the findings of the science of social accounting—a measuring of the results of public effort in terms that have social and economic implications for the group as a whole. It is well to know that a project belongs to the category of a permanent improvement; that it is self liquidating; or that it belongs to other classifications—but such characteristics are not the essential criteria which should be policy-determining. We should be able to measure

whether or not the project is socially productive or socially harmful and make fundamental decisions on that basis. The accounting technique is essentially a measuring technique; it has its limitations, but I do not know of any edict that would forever relegate it to measuring the commercial concepts of capital and profit and loss and service and disservice as contrasted with measuring the social and economic concepts of the same things. The social planners and accountants should get together and see whether their joining hands may not create the much needed methods of social accounting.

The method of financing such socially and economically productive improvements must depend on general economic conditions. Financing permanent productive improvements by borrowing is in harmony with strict principles of sound finance, if the increase in productivity and incomes permits the discharge of the debt service without increasing tax rates.

Such a policy, however, is economically sound only if there are funds available in the capital market for which no other more urgent private demand exists. There may be periods in which the issue of government bonds is a great help to financial institutions. In the last decade banks and life insurance companies would not have been able to find investment outlets for their funds if government issues had not been on the market.

If, however, the economy is in a stage of development in which private demand for capital absorbs all avilable savings, a delay of those public projects which can be delayed without harm is indicated, and the government should curtail its borrowing. In other words, fiscal policy ought to be geared to the requirements of the situation.

The New Federal Highway Program

THOMAS H. MacDONALD, Commissioner of Public Roads, Washington, D. C.

IT WAS in 1935, while the revenue-diverting efforts of those who thought the highways "good enough" were still at their height, that a statewide highway planning survey was begun in the first State. Others followed in quick succession until the studies had been begun in all States, the District of Columbia and Hawaii. One of the purposes in these surveys was to gather the facts that would dispel the "good enough" idea. The broader purpose was to provide a sound factual base on which to establish the revised highway programs and policies that are needed to cope with problems of a sort that were not apparent when the policies and programs still followed were devised.

It had been our hope that the clear indications of these surveys would have led, before now, to the establishment of a vigorous attack by the Federal Government upon some of the newer phases of the high-

way problem; a Federal attack which would supply the needed incentive and correlating directive to state and local attacks upon the same problems. A first draft of a plan of campaign was presented in the report "Toll Roads and Free Roads" which the President transmitted to Congress with recommendation of favorable action in the spring of 1939.

All such hopes are now deferred by reason of the more urgent necessities of the general defense program. Once again, as has happened more than once in the past, needs of the moment have intervened to divert and delay a logical evolution of the program of road and street building. But this time there is no question that the needs of the moment are the higher needs, and there is also no question that they are in many cases acute needs, which involve directly the efficiency of the defense program.

That there is not more to be done at this time of emergency to fit the roads of the country to the uses of national defense is due to a long prevision of these uses and a systematic provision of reasonably consistent roads and structures in the Federal-aid program. When the original Federal-aid system was in process of selection, the War Department was requested to make recommendation of the highway routes of importance to meet the potential demands of military usage. This request was promptly and intelligently met by the War Department in findings which were incorporated in a route map now known as the "Pershing Map of 1922." All of these recommended routes were provided for when the Federal-aid system was established. There have been periodic revisions, and during the past two years the Army General Staff, the State Highway Departments and the Public Roads Administration have coöperatively made a most careful review, followed by detailed revisions.

In its present form, this system of important military routes is known as the strategic network, and incorporates approximately 75,000 miles of the major roads of the Nation. It represents the agreement of the military and civil highway officials, both state and Federal, as to the long distance routes that will best serve the defense requirements of the nation. The benefits that accrue from long-time planning, and that in times of emergency become priceless, may be illustrated by the bridges on the main lines of the strategic network. On all such sections of the network there are 16,692 bridges, 85 percent of which are so designed as to be capable of carrying, within the limits of allowable overstress, the heaviest loadings of military ordnance likely to be moved upon the public highways, up to and including the 55-ton tanks. While the remaining 15 percent needing strengthening or rebuilding present a considerable program, it is insignificant when compared with the chaotic condition that could easily have resulted had there been no planned program for the supply of just such facilities and had that program not been consistently followed over a span of two decades. Again, however, a substantial adequacy of most of the

important military roads gives rise to an unwarranted skepticism of the seriousness of the deficiencies that exist, and that are shown to exist by the very complete and careful inventories of the highway planning surveys. When such skepticism dangerously delays the undertaking of improvements urgently needed, highway officials possessed of a healthy respect for the essential time element in construction may be pardoned a spasm of consternation. It is very difficult, indeed, for those who are daily confronted with highway traffic problems to understand the apparent disregard of the essential element of transportation in many of the operations undertaken in the defense program. Because it falls within the line of their normal occupation the highway officials have followed with unusual interest the evidences of a similar disregard in some of the nations involved in the war in Europe. They hope that our own country will be spared the harsher penalties of that disregard; but they know that in a nation on wheels, such as ours is, every concentration of men and materials creates inevitably problems of highway traffic which are the greater and more difficult of solution in proportion to the size of the concentration. The virtually unparalleled concentrations now being planned will inevitably be gravely embarrassed in the absence of a more understanding provision than has yet been made for the service of the transportation needs they will generate.

Naturally, the earliest need is felt on the roads and streets that give local access to the army posts and navy establishments and to the industrial sites where the defense effort first concentrates. Studies of the probable needs of this category were begun by the Public Roads Administration and state highway departments early in 1940. In response to a direction of the President these studies were broadened and revised as required by later developments, and a report of the more important needs was prepared as of February 1 of this year. The findings of that report were based upon an estimate of the needs at 247 military and naval reservations and defense industry sites. Since this date the total number of reservations and sites has risen, as of April 26, to 288, and the addition of 100 more in the very near future is the least that can be expected. At nearly all of such reservations and sites there are needed highway improvements, some of the most urgent character.

In the same report we presented the determined needs of improvements on the strategic network, scaled down to the very minimum of absolute necessities.

As of the date of the report, the total cost of necessary access road improvements was estimated at $220,000,000; the cost of minimum improvements necessary on the strategic network at $458,000,000. Making full allowance for work which might be done with already available Federal and state funds, the report recommended immediate

appropriation of $150,000,000 expendable to pay the whole or any part of the cost of access roads, and of $100,000,000 expendable when matched with State funds for improvements on the strategic network.

Every possible effort has been made to apply to these necessary defense road improvements the presently available funds administered by the Public Roads Administration and the Work Projects Administration, which are the only Federal funds available for the purpose. After all had been done that could be done in this way, there remained unprovided for on April 26, at only 204 of the 288 reservations and sites certified as important up to that date, more than $122,000,000 worth of unfinanced work, work that cannot be undertaken on the terms applying to the expenditure of presently available funds.

Similarly, despite a willingness of state coöperation indicated by an obligation of more than 50 percent of the apportioned Federal-aid funds to defense road needs, it will be impossible in any near future to meet even the minimum requirements of the strategic network with Federal-aid funds appropriated for the program as now constituted.

The acuteness of the need is increasing, with implications of severely handicapping the efficiency of the defense effort. However, early action on this matter now appears probable, and the provision that may thus be made to meet the pressing needs of national defense will constitute the principal new element in the Federal highway program, which otherwise still follows the familiar Federal-aid pattern evolved through a score of years.

One recommendation made in the defense road report went beyond the urgent needs of the present. It was a recommendation of the appropriation of $12,000,000 to be matched equally by the States and used as a fund for the detailed planning of a shelf of important deferrable highway projects to be undertaken after the present emergency. Identical in motive with the similar recommendation of the National Resources Planning Board applying to public works of all kinds, it is the hope that this money, if provided, will permit a definite start to be made upon the planning of some of the more important facilities comprised in the interregional highway system recommended two years ago in the report *Toll Roads and Free Roads*.

Added confidence that a program, such as was roughly sketched in that report, will eventually receive Federal support is given by the President's recent action in appointing a National Interregional Highway Committee to advise the Federal Works Administrator, after a review of the available information on the need for such a program and the means by which it may be accomplished.

But the recommendations made in the report of two years ago did not stop with the suggestion of the interregional system. On the contrary, they contemplated nothing less than a plan for the balanced development of rural roads and city streets of all classes.

In a brief statement the recommended program would consist of a balanced development of the following elements.

1. The further improvement of the presently designated state and Federal-aid highway systems as ordinary rural roads, revised by local modification as necessary to enable them to support and efficiently discharge their traffic with a maximum of safety. This will involve some strengthening and widening of existing surfaces and the local correction of excessive curvature and gradient and deficient sight distance to accommodate present and reasonably anticipated speeds.

2. The designation, location and development of a new system of interregional highways joining as directly as practicable the larger cities of all States. Designed especially for service of the highway movements of longer range, these routes should by-pass all smaller towns and should embody the principle of limitation of local access wherever necessary to secure the safety and dispatch of the express movement. Wherever practicable they should follow the general lines of existing primary highways, but should depart from them as necessary to effect direct connection of primary controlling points and obtain adequate width of right-of-way and the control and protection of their accesses.

3. The further improvement of roads secondary to, and feeding the primary highways, as required for the economical service and safe conduct of their traffic; and the careful extension of improvement to presently unimproved roads of this class only as justified by traffic requirements and definite social and general economic considerations, and as such extensions are seen to be capable of support within the limits of revenues specifically anticipated. The further improvement of roads of this class should be made consistent with the probable future use of the rural lands served by them, as such probable future use is indicated by surveys now being conducted by State and local agencies under the inspiration and coördinating direction of the Public Roads Administration, Federal Works Agency.

4. In, and in the vicinity of cities, continuance of a normal program of street reconstruction and repair; and added thereto, a planned development of arterial routes connecting peripheral areas and important rural highways with the principal urban center, and similar arterials located, or circumferential lines to accommodate traffic interchanging between the various external highways and peripheral areas. The added facilities should also include other major arteries, as required, to join directly the recognized subordinate focii of urban development.

5. As an especially desirable feature of the program in all its parts, the elimination of railroad grade crossings in the order of the determined relative hazards and economic losses entailed by them, and a similar separation of the grades of important highways at heavily traveled intersections.

It is believed that such an integrated program should be, and now can be defined, by agreement, in each State and in the country at large, upon the general objectives to be attained in a relatively long period (say 20 years), and by the more detailed planning of a consistent partial program realizable within the limits of the definitely scheduled and anticipated revenues to accrue within a shorter period (say 10 years).

It is to some such total program as this, the Federal Government taking its appropriate share, that we look forward, hopeful that it may be in some measure realized in a happier and more peaceful period after the war.

Discussion

C. M. NELSON, Editor, *Better Roads*, Chicago, Ill.

AT THE same time that we are planning public-works programs in preparation for cyclical periods of depression, and for depressions succeeding extraordinary national effort for non-productive ends, we must concern ourselves with the permanent value of Federal public

works in relation to depression of another kind. In good years and bad we have with us more or less permanently depressed areas of the country —States and regions that are rapidly being drained of their resources. For such an area the consequence is a steadily dwindling standard of living. But the poverty and bankruptcy and depletion of natural resources of these areas is a matter of concern for all of us, wherever we may live.

I should like to emphasize, as the report issued by the National Resources Planning Board early this year has emphasized, that advance programming of public works is a joint affair of Federal, state and local governments. Striking a proper balance may involve us in some difficulties.

In the field of highway development, although through the medium of the state-wide highway planning surveys we have collected valuable basic planning data, the question of relative participation in the support of improvement programs remains to be dealt with. Our highway development is somewhat peculiar in the manner of its financing. In the United States, highways are built and maintained chiefly from the proceeds of gasoline and other specific motor taxes. Other major sources are property taxes and Federal aid. The income from gasoline taxes and registration fees has been a relatively stable income from year to year.

For many years, Federal contributions have had a share in the development of our systems of main highways, built and maintained by state agencies. The ratio of total Federal and state payments at any given time is largely an affair of chance. Congress determines the amount of the Federal highway aid. In the years following 1933 it made substantial emergency apportionments to the States; more recently the annual amounts have been somewhat less. The rates of gasoline and motor-vehicle taxation, fixed by the State legislatures, have leveled off on a kind of plateau in recent years. On the whole, planners in the highway field, although they tend to liken the operation of the system of primary highways to the operation of a private business, appear reluctant to get into a scientific rate-making procedure, preferring instead to adhere to motor-tax rates that the users of the highways are now paying more or less cheerfully, rather than basing the extent of the program as a whole for a given period on indicated need and undertaking to review and modify the assignment of costs as between the tax sources involved.

Twenty-fifth Anniversary of the National Park Service

EDITOR'S NOTE.—On August 29, 1941, in Rock Creek Park, Washington, before a gathering of interested citizens, there was a picturesque ceremony to celebrate the twenty-fifth anniversary of the establishment of the National Park Service by Act of Congress. Newton B. Drury, Director of the National Park Service, presided. Horace M. Albright, a member of the Service from its organization, and Director from 1929–1933, now President of the American Planning and Civic Association, was the narrator of the Chronology, as the twenty-five candles were lit, one for each year. The following were invited to light the twenty-five candles: (1) W. H. Jackson, pioneer photographer on the Hayden Expedition in 1871; (2) Hermon C. Bumpus, pioneer in national park interpretive work; (3) Mrs. Arthur E. Demaray, representing the Associate Director and lighting the candle in honor of John Muir; (4) Dr. Carl P. Russell, representing the Branch of Interpretation; (5) Miss Isabelle Story, representing the Office of Information; (6) Hillory A. Tolson, representing the Branch of Operations; (7) John D. Coffman, representing the Branch of Forestry; (8) Thomas J. Allen, representing the regional directors; (9) George A. Moskey, representing the Office of Chief Counsel, and honoring Congressman Edward T. Taylor; (10) Dr. Frank M. Setzler, representing the Advisory Board on National Parks,

ERRATA

On page 57 in the Editor's Note:

No. 17 should read: Hon. Richard Lieber, Chairman of the Board, National Conference on State Parks.

Dr. L. I. Hewes should be number 18.

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HORACE M. ALBRIGHT
President, American Planning and Civic Association, Narrator

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the suggestion and when they returned to the outposts of civilization they set in motion the effort that brought about the establishment of the first national park and the great system of today.

(*2*) *1872—Yellowstone National Park.* Through the efforts of the members of the Washburn-Langford-Doane expedition—particularly Cornelius Hedges and Nathaniel Langford—and such others as Delegate William Claggett of Montana, Dr. F. V. Hayden of the Geological Survey, W. H. Jackson, the pioneer photographer, Captains Barlow and Heap of the Army Engineers, and Senator Pomeroy of Kansas, the Claggett-Pomeroy bill to establish Yellowstone National Park went through Congress and was signed by President Grant on March 1, 1872.

(*3*) *1873—John Muir's writings. Muir Woods National Monument established in 1908.* On few men has Nature exerted the tremendous pull felt by John Muir, the Scotsman, nearly all the days of his useful life. When he heard of a particular wilderness he had no peace until he went there and penetrated its fastnesses and discerned its natural values. In 1868 he came to California in search of Yosemite. From then until his death his musical pen and his forceful actions were strong factors in the advancement of the national park idea. Today, in Muir Woods National Monument, the giant Redwoods stand in silent tribute to his work.

(*4*) *1890—Yosemite National Park.* The first white men to see Yosemite, the enchanted valley, were members of the Mariposa Battalion, who went into the region to bring marauding Indians down to make peace. After this, word of the great valley's startling beauty spread rapidly and in 1864 Congress granted it to the State of California as a public reservation. It thus became the first State Park; and, in 1890, after John Muir's sensitive pen had told its story to the world, Congress established it as Yosemite National Park.

(*5*) *1890—Sequoia National Park.* In 1833 a group of men under Captain Joseph R. Walker crossed the Sierra Nevada en route from Salt Lake to Monterey and turned the first white men's eyes on the Big Trees of California—the Sequoia gigantea. In 1858 Hale Tharp, a stockman, came upon the "Giant Forest" grove, and in the following years many others went into the great trees and there began a movement to save them in a national park. Prominent people down in the valley around the town of Visalia, led by George W. Stewart, were active, and on September 25, 1890, Congress established another national park—Sequoia.

(*6*) *1890—Chickamauga-Chattanooga National Military Park.* The foundation for the system of national military parks of today was laid in 1890 when Congress gave the Chickamauga-Chattanooga area this deserved status. This battlefield, lying in the hills of Georgia and Tennessee near the modern city of Chattanooga, was the scene of one of the major campaigns of the Civil War from June 23 to November

25, 1863. The military parks were under the supervision of the War Department until 1933 when they were transferred by an Executive Order to the custody of the National Park Service.

(7) *1899—Mount Rainier National Park.* Mount Rainier bears the name of Admiral Rainier of the British Navy. It was so called by George Vancouver, a young British officer who "discovered" the great peak in May, 1792. Rainier's 14,408 feet of rocks and glistening snow challenged all men who looked upon it, but not until August 17, 1870, did any man reach the top. The first two were General Hazard Stevens and Philomon Beecher Van Trump. It became a national park on March 2, 1899, six years after Senator Watson C. Squire had first introduced a bill to create "Washington National Park" to protect Mount Rainier.

(8) *1902—Crater Lake National Park.* In a country schoolhouse in Kansas in 1870 a boy unwrapped the newspaper which contained his lunch and casually scanned the rumpled columns as he munched his sandwich and cookies. Suddenly he saw something which intrigued him. The boy was William Gladstone Steel. What he saw was a story about "a lake in the top of a mountain." It was Crater Lake. Years later the boy, now a man, saw the volcanic lake and made up his mind that it should become a national park. For 17 years he and his friends drove hard on the idea and on May 22, 1902, Congress brought it to reality in establishing Crater Lake National Park.

(9) *1906—Devil's Tower and Chaco Canyon National Monuments.* As the national park movement gained momentum and spread eastward from the Far West there began a parallel movement to preserve the historic and prehistoric ruins of the Southwest. This led to passage of the Act for the Preservation of American Antiquities, known generally as the Antiquities Act of June 8, 1906, fathered by Hon. John F. Lacey, Congressman from Iowa, who also sponsored the legislation to create Mesa Verde National Park. The efforts of men like Dr. Edgar Lee Hewett, who had seen and saved the lovely Pueblo Bonita at Chaco Canyon, were effective. The first national monument to be established after the passage of the Act was Devil's Tower, the 865-foot monolith in Wyoming.

(10) *1906—Mesa Verde National Park.* This fine feeling for the protection of the ruins of an ancient civilization resulted in the establishment of national parks as well as national monuments. On June 29, 1906, the most notable and best-preserved prehistoric cliff dwellings in America were set aside as Mesa Verde National Park in southwestern Colorado.

(11) *1910—Period of organization and legislation—Glacier National Park.* When Glacier National Park was established in 1910, some of the Federal parks and monuments were administered by the War Department, some by the Department of Agriculture and others by

the Department of the Interior. This disjointed method of operation made for inefficiency and, generally, was unsatisfactory. As early as 1908 Dr. J. Horace McFarland addressed a conference of Governors called by President Theodore Roosevelt advocating the full conservation of scenery, and as a result of the wide-spread civic interest focused upon the national park proposals, President Taft, in 1912, sent a special message to Congress recommending the establishment of a Bureau of National Parks. Dr. McFarland continued to lead the many conservationists who supported the National Park Service idea and as President of the American Civic Association he called upon Franklin K. Lane, then Secretary of the Interior, urging him to unify the parks into one integrated system. It was Senator Reed Smoot who sponsored the National Park bill in the Senate in 1916 and Judge John E. Raker and William Kent who introduced bills into the House. The Kent bill was finally passed by the House and steered through the Senate by Senator Smoot. President Wilson approved the measure on August 25, 1916.

(*12*) *1915–1916—Stephen T. Mather, first Director of the National Park Service.* In the year before Congress created the National Park Service as a bureau in the Department of the Interior, there were 16 national parks and 21 national monuments. This year, 1915, Secretary Lane had induced Stephen T. Mather to accept appointment as his assistant to take charge of park matters. Mr. Mather, a wealthy Californian, had given much of his life and fortune to the advancement of the park idea. To him Nature's superlatives in the West were familiar friends. His silhouette on horseback and afoot was thrown against many a glorious sunset in the High Sierra.

(*13*) *1916—Rocky Mountain National Park.* Stephen Mather had written to his friend and fellow Californian, Secretary Lane, complaining about the lack of attention given the parks. Secretary Lane wrote back: "Dear Steve: If you don't like the way the parks are being run, come down and run them yourself." Mr. Mather did just that; and after Congress created the National Park Service on August 25, 1916—twenty-five years ago—he was appointed its first Director.

(*14*) *1917—Mount McKinley National Park.* On August 1, 1916, as the National Park Service was approaching reality, the national park idea reached out beyond the continental United States with the establishment of Hawaii National Park; and one year later, on February 26, 1917, it was extended into Alaska with the establishment of Mount McKinley National Park. Mount McKinley, towering under perpetual snow 20,300 feet above sea-level, is the highest mountain in North America.

(*15*) *1919—Grand Canyon National Park.* From 1908 until 1919, when it became a national park, the Grand Canyon of the Colorado River in Arizona was a national monument. In it is preserved a colossal

exposure of the secrets of geology; the story of the earth itself. As far as can be determined, its history began before there was any living thing. Today men come from all the world to look into it, then go away and try to describe it, but none has succeeded.

(*16*) *1919—Zion National Park.* Father Escalante, the strong-hearted Spanish priest, went through the flaming canyons of the country now protected in Zion National Park as early as 1776, when the British colonies to the East were demanding that they be free. In 1872 another strong man went there—Major John Wesley Powell, the conqueror of the Colorado canyons; and in 1909 the area became the Mukuntuweap National Monument by Presidential proclamation. The name was changed to Zion in 1918 and in 1919 Congress made it a national park.

(*17*) *1921—National Conference on State Parks.* With the national parks and national monuments becoming well organized under the National Park Service, people interested in parks became concerned with the proper coördination of the scattered efforts to develop state parks. Stephen Mather was active here, too, and in 1921 he summoned his friends and co-workers to Des Moines, Iowa, for the first National Conference on State Parks. Out of that meeting grew the organization of today. Recently it observed its coming of age and all those States whose park programs it has helped advance paid tribute to a job well done.

(*18*) *1926—Interbureau. Agreement on Roads and Trails—Great Smoky Mountains and Shenandoah National Parks.* The National Park Service received its first substantial appropriation for roads and trails within the parks in the Road Act which was passed on April 9, 1924, authorizing appropriations of $7,500,000 of which $1,000,000 was made available for the 1925 fiscal year. With funds in hand, the Service began the construction of what is now the "Going-to-the-Sun Highway" in Glacier National Park. Director Mather determined that a good job be done and asked the Bureau of Public Roads to look in on the project. The result was so satisfactory that an "Interbureau Agreement" between the Service and the Bureau of Public Roads was drawn up and signed in 1926. In the 15 years since this agreement went into effect $82,000,000 worth of roads and trails and parkways have been constructed under its provisions. In 1926, after the report of a special commission appointed by the Secretary of the Interior, Congress passed legislation authorizing the Great Smoky Mountains, the Shenandoah and Mammoth Cave National Parks.

(*19*) *1929—Horace M. Albright became Director and Acadia National Park was created.* The year that the narrator became Director of the National Park Service, another national park was created. On the rocky, timbered coast of Maine—the only spot along the Atlantic border of the United States where the mountains come down to the sea—

lies the first national park to be established east of the Mississippi River. When authorized on February 26, 1919, it was called Lafayette National Park; today it is called Acadia. Mount Desert Island, on which the park is located, was discovered by the Frenchman, Samuel de Champlain, on September 5, 1604—three years before Jamestown and 16 years before Plymouth Rock settlements.

(*20*) *1931—Isle Royale National Park.* The protection of every form of wildlife is as much a part of the national park idea as the preservation of Old Faithful and Half Dome. Every park represents the protection of a complete environment. Nature must go her own way. Typical of a wilderness park supporting a variety of fish and wildlife is Isle Royale in the northern waters of Lake Superior. On this largest island in the largest fresh water lake in the world roams one of the largest moose herds in North America.

(*21*) *1933—Arno B. Cammerer became Director of the National Park Service—Many historic areas and monuments, and the National Capital Parks transferred to the Service—friends in Congress.* In the year 1933, in which Arno B. Cammerer became Director of the National Park Service, there were transferred more than 50 historic areas, which up to that time had been under the jurisdiction of the War Department and the Department of Agriculture. These areas included national military parks, battlefield sites, national monuments, national cemeteries, national memorials and the National Capital Parks of the District of Columbia. The acquisition of these areas marked the entrance on a large scale, of the Service into the field of the preservation of historic sites and structures and the memorialization of historic events. During the 20's one of the best friends the national parks ever had was Louis C. Cramton of Michigan, a Member of Congress 1913–31. He served first on the Public Lands Committee and for ten years was chairman of the subcommittee on appropriations for the Department of the Interior. He became the principal spokesman for the National Park Service on the floor of the House and was highly successful in bringing many park bills to enactment. For almost two decades in the 20's and 30's the national parks and the cause of conservation had another staunch friend in Senator Peter Norbeck of South Dakota where, as Governor, he had brought into existence Custer State Park. Senator Arthur Capper of Kansas collaborated with Mr. Cramton to secure the passage of the Act of 1930 under which appropriations have been made available for the purchase of parks, parkways, and playgrounds in the District of Columbia and nearby Maryland and Virginia. Edward T. Taylor of Colorado, member of the House of Representatives 1909–1941, for many years a member, and for four years Chairman, of the Appropriations Committee, was a good friend of national parks.

(*22*) *1933—CCC and other Emergency Activities.* The Civilian Conservation Corps, created in 1933, and the other emergency work

agencies of the Federal Government, in the last eight years have given the park and recreation movement just exactly the sort of boost it needed. There was need for planning and development; need for additional personnel at desks and in the field; need for funds and need for multiple manpower. All these were provided and national, state and local park programs have benefited. The national parks have new and better recreational facilities; state parks have appeared in many States which had none before; and recreational demonstration areas for organized group camping have been developed in those communities where they were most needed.

(*23*) *1934—Blue Ridge, Natchez Trace, George Washington and Colonial National Parkways.* It was natural that the responsibilities of the National Park Service should grow into the planning and development of national parkways—those stretches of highway for the pleasure of the people, winding through natural settings and tying together individual areas in the Federal Park System. There are the George Washington Memorial Parkway, embracing many landmarks associated with the life of Washington; the Blue Ridge Parkway, planned to connect Shenandoah and Great Smoky Mountains National Parks; the Natchez Trace National Parkway, marking the route of the famous old trail by that name which joined the Appalachians and the Mississippi River at Natchez and the Colonial National Parkway, an important inter-park connection between Yorktown and Williamsburg, now being extended to Jamestown.

(*24*) *1935—National Historic Sites Act.* The National Historic Site is another type of area under the supervision of the National Park Service. Since the passage of the National Historic Sites Act of 1935, eight of these areas have come under the Service's jurisdiction. They are: Federal Hall Memorial in New York City; Fort Raleigh off the North Carolina Coast; Hopewell Village in Pennsylvania; Jefferson National Expansion Memorial in St. Louis; Manassas National Battlefield in Virginia; Old Philadelphia Custom House; Salem Maritime National Historic Monument in Salem, Massachusetts; and Vanderbilt Mansion National Historic Site near Hyde Park, New York.

(*25*) *1938—Olympic National Park—1940—Kings Canyon National Park.* As time passed on it became more difficult to secure legislation which would place extensive areas under the protection of the National Park Service. Over 60 years ago, in 1881, Senator John F. Miller of California, introduced a bill into Congress to create a National Park of the entire west flank of the Sierra Nevada from Tehipite almost to Porterville. In June of 1938, after years of unsuccessful efforts to add the Kings Canyon country to Sequoia National Park, the Gearhart Bill to create the Kings Canyon National Park became a law, bringing into the system the crest of the Sierra from Sequoia to the headwaters of the San Joaquin, including the incomparable Evolution Valley. It

took almost as long to secure an adequate national park on the Olympic Peninsula. It was in 1904 that Congressman F. W. Cushman of Washington introduced a bill into Congress to create the Elk National Park. Finally on March 2, 1909, President Theodore Roosevelt signed a proclamation creating Mount Olympic National Monument of some 600,000 acres, but the area was almost cut in half under the pressure of World War I. In 1935 Representative Wallgren renewed the effort to enlarge the monument into a national park but it was not until March of 1940 that the bill became a law. At last these glorious wildernesses have attained their deserved recognition, and the National Park Service pledges to protect them from those forces which might do harm. Secretary of the Interior Harold L. Ickes, with the support of President Franklin D. Roosevelt, whole-heartedly championed the establishment of these parks. Looking into the future—and many more anniversaries—the Service seeks other ways to serve the people and the land.

The National Park Service

The National Park Service is a bureau in the United States Department of the Interior. It is charged with the responsibility of administering the national parks, national monuments and historical areas. Under its supervision are 164 such areas in the United States, Alaska and Hawaii.

The Directors of the National Park Service have been:

STEPHEN T. MATHER 1917–1929
HORACE M. ALBRIGHT 1929–1933
ARNO B. CAMMERER 1933–1941
NEWTON B. DRURY 1941–

An Over-All Urban Housing Program

JOHN IHLDER, Executive Officer, The Alley Dwelling Authority for the District of Columbia

HOUSING is extending our vision in planning much as it is in financing.

So long as financing was the end and housing the means, we had short-term financing. The banker, the builder and the real estate dealer all geared their operations for quick turnovers. That this made housing expensive was not their worry, so long as they had a good market. But when the market began to fall off it did become their worry, though the majority of them long failed to recognize the fact. They thought it merely another of those cycles with which we have been familiar; housing shortage followed by housing surplus followed by housing shortage, followed by housing surplus. They thought that all we needed was patience while the buyer took his losses. Then we would be ready for the next turn with its fees, commissions and profits.

This, of course, was predicated upon an ever-expanding community—national and local—in which the cyles formed a spiral. The advance of the next cycle would not only recover all lost ground, wipe out all past mistakes, but carry us to new heights. It was very stimulating. But when the rate of population growth began to decline, the spiral flattened, the recovery period lengthened. So, with the aid of government insurance, we have doubled and may treble our private financing period.

In planning we used to say that twenty-five years was as long as we could look into the future with any assurance. Despite all our stumbles and falls during the past twenty-five years the evidence is that our planning has been advantageous. Obvious defects in it have been that it was piecemeal and that it did not take in a long enough future. According to our national habit, we have concentrated upon one or a few factors in our problem, and, ignorantly or willfully, ignored others. The ignored factors have tripped us. Among these was housing, whose life-expectancy exceeded our planned future.

When public housing became a fact, the question of life-expectancy for the house was inevitable. Under private enterprise a house was considered either temporary on the score that it would soon be demolished to make way for a bigger and more expensive structure, or immortal on the score that someone had invested money in it and this investment was perpetual. On either of these scores it seemed futile to amortize the cost of a house. Moreover, amortization would increase current costs and current costs were already too high. So we assumed either that depreciation of the building would be compensated for by increased land value—due to population growth, or that the building would stand forever. In either case its cost need not be written off. Of course, there was an

element of contradiction in these two assumptions, but life is full of contradictions. Such easy assumptions, however, were not possible with public housing. The cost must be recovered. So a life-expectancy was estimated. The estimate is sixty years—two generations.

Then an interesting thing happened—vehement objection to so long a period. Yet in every old city there are today many well-built houses erected more than sixty years ago. Some of them are in slums, some are in fine residence districts. Some are worth, on today's market, less than they cost. Some are worth much more than they cost. The difference is due primarily: first, to the type and plan of the house itself; second, to the character of its neighborhood.

The old houses that have lost in value due to type and plan were those built to yield the greatest immediate profit, or to meet the personal desires of the first owner. The houses that have retained value or increased in value are those which meet the requirements for sound investment. Both the gainers and the losers have, of course, been affected by the character of their environment. By and large, however, the gainers have been soundly constructed houses of moderate size, with good-sized rooms that are well lighted and well ventilated, *i.e.*, rooms with generous windows opening on generous outdoor space.

Of course it has helped if the architectural design was pleasing; but that was not vital, nothing like as important as yard space. There are so many old dwellings that once had protuberant bay windows which, under skillful treatment, have been given boyish silhouettes, that any change in design seems possible if the basic plan of the house is good. As for modern conveniences and gadgets, what is modern today won't be ten years hence. But if the house is well built and well planned, it can be kept up with the times. Old houses today have quite modern bathrooms where hall bedrooms used to be, and their kitchens have been modernized time after time as first the gas company and then the electric company made improved equipment available.

So sixty years seems a conservative life-expectancy for a well-built, well-planned house in an adequate setting. There is no question that structurally it will stand that long. Consequently, a shorter life means waste of materials—and one of our realizations during the past twenty-five years is that waste of materials is an extravagance. But more compelling than this realization is the realization that the house should be paid for during its lifetime, for we can no longer count upon increasing land values neutralizing depreciation. If it will stand for sixty years, why should it be amortized during thirty years? That would saddle a burden upon the present generation in order to present the next generation with a free gift. The very thought is absurd to traditional thinkers, it goes counter to our custom of leaving as much of our debts as possible to our children. Witness the long-term bonds of our railroads.

But if we are to assure the house a life long enough to avoid extravagant waste of materials and to make possible repayment of cost during that lifetime, we must give stability to its neighborhood. In that direction we have made progress. Inefficient though our zoning regulations have been, they have demonstrated potentialities. The principal new destructive force has been automobile traffic, which, while making wider areas available for housing has incidentally deteriorated intervening areas. But even that we are now learning to control. Our greatest handicap at present is that traffic has become a specialty of highway engineers who see nothing, hear nothing, think nothing, either evil or good, of what goes on back of the building line.

In this we are again demonstrating our national habit of trying to solve our problems piecemeal. But the fact that we now are making twenty year highway plans instead of five and ten year ones, is cause for optimism. For a twenty year highway plan must take some account of building development. Then, too, city planners are returning to the central city. After spending the past quarter century acquiring knowledge and experience dealing with the easier tasks presented by suburbs and regions, they are now, we hope, ready to tackle the harder tasks which they abandoned after giving us a few grandiose designs for civic centers. So there is reason for a belief that the character of neighborhoods will be stabilized enough to justify good housing. This means that city planning will extend its vision from a twenty-five year future to one of at least sixty years.

During the coming sixty years we shall have war and peace, prosperity and depression, housing surplus and housing shortage. Account must be taken of all of these in the housing program. Our objective can be clearly stated: a community with an adequate supply of good dwellings that will meet the social and economic needs of all its people. This means a community without slums or substandard dwellings. For so long as there are substandard dwellings, they will be occupied. And so long as substandard dwellings are occupied there will not be an adequate supply of good dwellings. So our cities must, in large measure, be rebuilt. And because, along with a diminishing rate of population growth, we now spread our cities wider, they must be rebuilt more spaciously. For experience certainly has taught us one thing; when in doubt provide more space, not less, whether within the house itself or in its environment.

The building and rebuilding of the future will involve readjustment of values. There is talk, there is possibility, that new materials and new methods of construction will make house building much cheaper in the future. There has been this talk for the past twenty-five years. If it proves true, it will affect the values of existing buildings. But much more important is the effect of greater spaciousness. The appeal of space has contributed largely to the growth of suburbs and the de-

population of central areas. In rebuilding these central areas they must be given the advantages of space. Land overcrowding belongs to the past.

Quite aside from the possibility of cheaper permanent construction is the question of temporary construction. During the next sixty years there will be periods when we shall need many dwellings quickly, but for short-term use only. To meet emergency needs we shall have to provide, not for an increased population but for a shifted population. When the emergency is over, that population will tend to redistribute itself. For this temporary use we shall need temporary housing.

Temporary housing is expensive. However cheap the structure itself may be, it still requires land, streets, water, sewers, not to speak of schools and other community facilities, just as does permanent housing. If it is removed at the end of the emergency, all the costs must be written off in a comparatively short time. If, in order to lengthen the amortization period, the temporary housing is permitted to remain after the need for it is gone, it becomes a ruinously depressing burden upon the community.

Evidently there should be no more temporary housing than is necessary to meet the emergency needs. And these needs should be reduced to minima by distributing centers of emergency employment to places where workers are, instead of by shifting population. This is a phase of planning that will be part of a sixty-year program.

Of course there are emergency needs which can not be met in established communities, and for which new and often temporary communities must be constructed. Powder plants are illustrative of employment centers the whole cost of which, including housing of employees, should be charged to the emergency. Ship-building plants are in another class. Appropriate locations are few and usually are now occupied by permanent communities. The emergency work may double the population, and after the emergency is over, the population may shrink to its former size.

The over-all housing program should provide for such expansions and contractions. In every old community there are substandard and borderline dwellings. As a rule it should be possible to erect new permanent dwellings to meet emergency needs at least equal in number to the substandard dwellings. When the emergency is over, the areas of substandard housing may then be redeveloped for those uses most beneficial to the community. Often this will not be housing. Even when it is housing, usually it should be more spacious, provide for a less dense population.

While the initial cost of permanent housing is somewhat greater, its net cost is less than that of temporary dwellings. And if it can later be used to compensate for demolition of substandard buildings, its positive value in terms of community benefits will be very great.

A danger to avoid is compromise between temporary and permanent housing that will leave us in doubt what to do with it. Housing should be definitely either temporary or permanent. If temporary, it should be so constructed and so financed that it can and will be cleared away when the emergency is over. If permanent it should be so well planned and well built that it is worth retaining.

In summary then, an over-all housing program must cover at least sixty years, because sixty years is a conservative life-expectancy for a good dwelling. A sixty-year program must have enough adaptability to take account of periods of strain, utilizing them to the utmost in achieving its objective of a community with an adequate supply of good dwellings—which implies a community without any substandard dwellings. Success of this program depends upon a lengthened vision both in city planning and in financing; for city planning (and zoning) must give stability to the neighborhoods in which sixty-year houses are erected, and financing must be adapted to this increased life-expectancy.

Defense Housing—Now and Afterward

TRACY B. AUGUR, Department of Regional Studies, Tennessee Valley Authority, Knoxville, Tennessee

WE ARE tackling the great job of national defense to preserve the gains that have been made in three centuries of nation building. The preservation of those gains, viewed through the dark glass of the moment, is no mean task, yet we cannot be content with performing that task only. We want to continue the job of nation building along with its defending. If the main product of our efforts for the time being must be armament, then we must turn for the satisfaction of our more constructive urge to those by-products of armament production which serve, or can be made to serve, the long-range purposes of peace. For the good of our souls, in times like these, it is important that we make the most of these by-products.

This defense effort of ours is a stupendous undertaking and many of its by-products are in scale. Already this Nation has appropriated or authorized a total of defense expenditures greater than all of its expenses in the first World War. Far from being dismayed by these great totals, the American people have found comfort in the increasing strength that they have purchased. There has been no holding back on expenditures for the weapons on which the security of our defense is based. Instead there has been demand for ever greater quantity and ever better quality, let the cost be what it may.

We have not sought to place limitations of cost on any of these vital products. We have not told our admirals to keep battleships within some predetermined average, nor our generals that they must be content with

low-cost tanks, nor have we fixed ceilings for the cost of fighting planes. Neither have we set arbitary limitations on the cost of the shipyards and factories and tools needed to produce them. We have not, simply because we have wanted our productive machinery and the things it produced to serve their defense functions in the most effective manner, and we could not afford to let an insufficiency of dollars bar the way.

For all the main products of defense—the vast implements of war that we are forced to produce for the emergency, but fervently hope to discard afterward—we have adopted an attitude of prudent generosity. But for one of the most important and useful by-products of the program —the new housing that the emergency requires and which for the most part can serve a long period of peacetime usefulness thereafter—we have adopted an attitude of parsimonious price limitation. For the implements of war our attitude has been consistently to place quality ahead of price, and wisely so, but for one of the greatest implements of peace that the program is producing we have chosen to place price ahead of quality. For guns and planes and tanks we want the best that can be had at any price. For the homes of those who produce them we want only the best that can be had for a low price.

This strange inconsistency is not a matter of economics but of attitude. It is an attitude not of any one group or class or party, but of the nation as a whole, the composite attitude of all of us. We can easily afford whatever quality or quantity of housing we believe is necessary, just as we can and will afford whatever weapons seem essential to our safety. In a forty or fifty or who-knows-how-many billion dollar program, the expenditures for housing at best will not loom large. We can as well afford, in fact can better afford, housing which measures up to the best standards of home and neighborhood and community development than housing which is held to minimum and often insufficient standards in order to squeeze under a fixed price. It would cost little more in dollars, and probably less in ingenuity and effort, to produce defense housing that would be an inspiration to succeeding generations, than it is now costing to produce it to standards that frequently must fall below the best of past achievement. The pity is that we are missing the mark by such a little margin.

It is fortunate for our defenses that we have not recently passed through an era of low-cost thinking with respect to arms and munitions. The difficulty that we face in housing is that we have carried over into the defense effort a connotation born of previous slum-clearance operations and the subsidized shelter of low-income families. The word housing is suffering from an ingrowing adjective that became attached to it in those days, and impedes clear thinking in these. We are still thinking in terms of low-cost housing instead of defense housing.

Defense housing connotes defense. There are many definitions of what it is we are defending, but in the last analysis it all boils down to

the American home and the freedom to enjoy it. Forty billions or more are going into the defense of the American home, and perhaps one billion of it will go into the production of the homes themselves. Do the defense homes we are producing measure up to our standards for the homes we are defending?

Many people will say "yes" emphatically. All permanent housing constructed as a part of the defense program is well built and weather tight. It meets minimum standards of room size, convenience, light and ventilation. It contains modern sanitary and housekeeping facilities. All the ingredients of a good house are there, pared down to a minimum at times, but even at the minimum, better than many millions of the houses that American families are living in today. It is probably safe to say that defense housing is well above the average of existing accommodations throughout the country, particularly if age of accommodation is taken into account. Housing that meets such standards is good housing.

The question is, is it good enough? Better-than-average is not an inspiring term, even though practical minds tell us that to raise all American housing to the standards set in the defense program would be a stupendous and revolutionary undertaking in itself. Do the defense houses we are building meet the standards of the American home as we would like to see it, not the American home that has emerged from a wild century of land speculation, but the American home of a future and better day, the American home that is worth fighting for? There is no inspiration in building to the standards of the past, even the recent past. If we are to find inspiration to offset the hopelessness of a world at war, we must do our new construction in terms of the America we dream of, the better nation we expect to see rise from the economic collapse of depression years and the world disruption of an exhausting war.

In these terms I feel that we are falling short of the mark; not very far short, but far enough to miss. The American home that we are fighting for is not just a well-built building, not even a building equipped with the gleaming bathtubs and refrigerators that have come to replace Mother as a fireside symbol. It is a dwelling place composed of house, neighborhood and community rolled into one, and offering an environment conducive to wholesome human life and growth. It is, of course, much more than a material thing, but the material foundation of it is what we plan and build in housing programs.

It is not a hard thing to produce, this home environment we dream of, easier in fact than puzzling about how the various ingredients may be slashed or omitted to come within a budget.

Why is it, if we have the financial fortitude to shoot hundreds of thousands of dollars worth of shells off into the bright blue sky, and with a slim chance of hitting anything at that, that we haven't the guts to spend for defense housing enough to make it really serve our defenses, now and afterward? Why must ingenious architects make small rooms

smaller to save ten or twenty dollars in the cost of a dwelling unit? Why must defense workers on whose continuing energy we depend, spend sleepless summer nights tossing in the heat because there wasn't quite enough money for roof insulation? Why must harried planners move little squares around on the drawing board to see if more houses can't somehow be squeezed into an acre?

I don't know the answer, but perhaps it's psychological. If so, let's stop thinking of defense housing in terms of housing, which is blistered with the adjective low-cost, and think of it in terms of defense, which implies placing purpose ahead of price. Let's think of defense housing as a weapon; a weapon to be used in repelling fatigue and despondency among the people on whose spirit this whole effort rests; a weapon that can be used with equal effectiveness in wars that are military, or social, or economic, whichever may be the kind that we shall have to fight in the years ahead.

I make no plea for extravagance in housing, but I do plead for a sufficient allowance for this vital arm of our defense to permit the building of well-planned homes in well-planned neighborhoods, with all the attributes of health and attractiveness and cultural surroundings for child and family that we like to think of as the American standard of living. We are spending billions upon billions to defend that standard. It won't hurt us to spend a few extra millions to achieve it.

The Place of Housing in Urban Reconstruction

FREDERICK BIGGER, Pittsburgh, Pa.

WE OBSERVE that parts of the city have been growing decrepit, and that those parts sometimes have been replaced functionally by substitute parts created in new locations. But the creation of new parts has not been accompanied, to any considerable degree, by elimination of the old parts. These remain, increasingly reluctant to respond to the tinkering of the amateur mechanic.

The word "amateur" is used advisedly, referring to the public, by whose well intentioned but unskilled hands the cities were put into three dimensions. During the period of the evolution of a city there undoubtedly was a subconscious hope, an assumption, that somehow the parts and the accretions might struggle successfully with one another for that faintly imagined, ultimate, balanced adjustment to one another that never quite arrived. As a matter of fact there was little then understandable evidence to show that failure to work for that balanced adjustment would bring results so inconvenient, so serious socially, and so costly as those we now see.

If this seems to be too sweeping or too literary a statement, it need not be inferred that the fabrication to which we apply the label "city,"

or "urban community," has no socially and economically salvageable value whatever. Nor need it be inferred that there is nothing that can be done but to let the urban centers rot still further while we hasten the process by building, in outer areas, repetitions of the earlier mistakes,—mistakes of basic organization which contain the seeds of later serious difficulties and of rapid and injurious deterioration.

As to the more spectacular alternative, involving the building of new, competitive and substitute cities in new locations—alluring as this is to the designer and to the layman's uncritical imagination, this is an academic and theoretical alternative, so long as the evolving economic system which envelops us is not geared to such processes. It is appropriate at least to mention this alternative to dealing directly with present urban communities, before taking a quick look at how we have dealt with them up to this time.

What we have done with our cities has been spottily done. More importantly, our thinking of the city has been spotty also. We have had "clean up, paint up "campaigns; we have modernized a few buildings; we have laid out relatively small new subdivisions inside the city; we have so ruined some spots that we can find no use at all for them; we have fed "improvements" to this or that district which demanded them, without too full regard for the effects elsewhere—the effect of the improvement itself, or its effect upon the municipal treasury; we have allowed one district to supply the demand for buildings by overcrowding and expansion to such a degree that other areas could find no demand to supply. All these, and many other things familiar to you, are indicative of the spotty attention we have given to the city. Still more recently, to get better housing for low income families, we built dwellings in spots where none existed before, or built more dwellings on one spot than had existed before in that spot. And still we did not look upon the city as a functional whole, except vaguely and imperfectly,—and sometimes we regarded it only as a statistical area. Of course, by "we" I mean we, the community of people who constitute the city.

Many planners struggled for the large concept. For one thing, our zoning administration compelled us to do this. But there was a great gap between that concept and the ability or willingness of the people to understand its significance. Now the gap is narrowing perceptibly, probably because urban disintegration has been becoming more obvious. There yet may be a chance that the gap can be closed effectively. There exists, to retard or prevent that closing, the sluggishness and resistance—the habit of thinking of the city only in parts.

If there is to be a proper place assigned to housing in urban reconstruction, then we must stress the need, first, to think of the organic design of the community, of the functions of the city as an entity. And here, of course, it is to the city in the sense of the community

that we must apply our thought—the urban community, regardless for the moment of the fact that we are not yet prepared to deal with its political, legal and financial unification. I have no doubt that we shall deal with that series of difficulties in due course, largely because it will be essential to do so. But we shall do this properly and effectively only when we first get hold firmly of the idea of the community as something which has to be redesigned and rearticulated functionally as an organism.

Some think that nothing worth while can be done until metropolitan communities efface the lines of demarcation that divide the urban area into many political subdivisions. Some will urge modifications of taxing procedure to secure more uniformity within the metropolitan region while still retaining the political differentiations. Still others will be impatient of any effort to differentiate between taxes imposed to cover the cost of public services rendered to property, and taxes imposed to cover the cost of services needed by people apart from their rôles as owners or non-owners of property (schools, for example). These persons may urge an immediate shift of some of the tax burdens away from real estate to other sources of income, resorting perhaps to income taxes for a part of the total needed revenue. A few, unhappily a very few, will try to discover how much of the cost of maintaining and operating a city arises directly out of the needs of the actual structures built upon the land, and the uses to which the structures (or plots devoid of buildings) are put; and how much of the municipal costs arise out of other and different kinds of obligation that the community officially has assumed.

Those of us who call ourselves planners may want to devise and execute plans which will condition the living habits of people of whom we have little or no understanding. Those of us who are "housers" may have similar desires and be similarly handicapped. It is obvious that many who are in the housing field are intensely concerned to improve the conditions of the underprivileged. They may assert the essential dignity of the common man. None need object to that attitude, real or assumed, in its proper place if on the other fronts calm and clear thinking is allowed to direct itself to the study and planning and construction that is necessary. But whatever the mixtures are—of vision and lack of vision, of bias and lack of bias, of skill and lack of skill—there should be enough common ground for coöperation in the basic job of redesigning and rebuilding the urban community.

It would be well to put aside, temporarily, discussion of the application of moral principles, so that the problem may be seen as clearly and freshly as possible. All will accept the statement that the desirable ultimate objective is to have made, or made over, the physical community and its corollary legal and financial patterns, so that we may have the best that an urban type of living has to offer. That is an over-

simplified statement. However, it is a good enough one to indicate that we need waste no time talking about a better one, when we know the importance of a program which should be started today. As a matter of fact, the planners have already started—somewhere; the housers have already started—somewhere; the real estate interests have already started—somewhere; the lawyers and the State Legislatures have already started—somewhere; the Federal Government has already started—somewhere. So, what about the general direction, the coöperative program, the procedures and powers that must be invented and used? The answers seem to lie in interrelated fields.

I–Planning powers, techniques and controls must be advanced. Relationships of physical things to other physical things may be established with much less difficulty than relationships of physical things to economic factors. In differentiating between, and in distributing, different types and intensities of housing, for example, we shall be dealing with the relationships between family budgets, private investment in housing, probably public investment in housing, local distribution of municipal expenditures for utilities and services, municipal revenues and debts,—and so on.

II–We shall see to it that the community is enabled, by the State, and through its local government, to take title to tax-delinquent properties which it may lease or sell, or withhold from sale. The powers to buy land, to trade land, to condemn properties, to assemble the larger sites needed where redevelopment may take place according to the redesigned city plan—such powers will be assured and will be used. There will be salvage where salvage is feasible, and where it is consistent with the redesigned city. A forecast of this trend will be found in parts of the urban redevelopment corporations bill recently enacted in New York State, in bills considered by the legislatures of Illinois and Utah, in recommendations of groups concerned with real estate, in the deliberations of professional-technical groups and others.

III–When we come to the point of acquiring tax-delinquent properties (and some cities already do this), blighted and slum properties, areas to be open spaces for public recreation, sites for schools and other community facilities, we shall have to consider our collective capacity to pay for these things and to pay for maintaining them. We shall study the budgets of property owners, the budgets of the municipal government and its various departments, the budgets of business and industrial enterprises, the budgets of transportation companies, and the budgets of the families who make up the community, and whose aggregate incomes in the long run determine what the community officially can afford to have and to do. We shall try not to disregard youthful impatience or ignore the significance of thwarted aspirations. We will study further, and perhaps we shall adopt a policy of retaining for very long periods, or permanently, the title ownership of the land

areas which are to be developed and held on long term leaseholds by corporations financed by conservative capital. Quick turnover capital will find other and more alluring opportunities elsewhere.

IV–Large scale financing and building organizations will increase in number and be utilized. Redevelopment corporations will be set up. To balance the restrictions imposed upon a redevelopment enterprise, in the form of controls in the public interest, there will be provisions to attract conservative investment. These attractions may be in the form of insurance against risks (perhaps insured mortgages) and, under certain conditions of a quid pro quo, may involve assurances of income on invested capital through the initial years of the enterprise.

V–Ways will be found and used, whereby local municipal governments may receive assistance in acquiring areas for redevelopment. If, for example, the Federal Government were concerned about nation-wide economic soundness, it might make a long term loan, at a very low rate of interest, to the local government to cover that excess cost of land acquisition beyond what the city itself, by strenuous use of all reasonable means available to it, could afford. In such a case, as a quid pro quo in this readjustment of economic responsibilities, and as a part of the more comprehensive undertaking, I suggest that a new and unique leverage might be utilized. It would involve a contract between the Federal and local governments, including among other things the requirement that the city (a) would protect the gradually reconstructed parts of the community which occupied the land in the acquisition of which the loan was utilized; (b) would give assurances that other parts of the community would not be devitalized by what is done within the area affected by the loan; (c) would adjust its capital budget, under analytical review in relation to the city plan, so as to reduce or eliminate unrelated "improvements" and give preference to further urban reconstruction conforming to the city plan and the city-wide economic pattern; and (d) would perform such other kinds of financial or social housekeeping as may be proper, on joint recommendation from conservative investment capital and those concerned with sound advancement of the city's public health and welfare.

Returning to here and now, for a moment, I have no concern whatever to calculate how many dwellings there shall be for families whose income is so many dollars per month, how many dwellings to create for families with twice that monthly income, how many for families of any other income range. Nor is this the time to be concerned whether or not those appraisals are valid, which have been made in old cities, of the amount of foot frontage of property devoted to business or other non-residential uses. At the proper time, in particular cities, when specific long term rehabilitation and redevelopment programs are being launched, it will be necessary to make some of these evaluations of what we have now and of what we should have in the future.

Then it will be necessary to consider this or that allotment of different uses for the land, or different degrees of one use or another use. Under the conditions of that time we shall be confronted with very difficult, but I think not unsolvable problems. We shall be compelled to make decisions which will influence the community for years to come.

This is the place to remind ourselves that the broad appraisals, the studies for rearticulation of the community, the repatterning of densities of areas of population and buildings and values are instrumentalities of simplification. Such study does not imply anything like the probable compounding of intricacies, and the delays, which we shall face if we neglect to envisage the broad relationships as suggested here. So far as time-consuming delays are concerned, it is axiomatic that less time is lost if the plans are well and appropriately formulated, if the foundations are soundly laid for future enterprises, than if we potter along for years in doubt as to the basic organization pattern.

Perhaps we are just beginning to have a faint glimpse of what the urban community's financial articulations and organization may become. Very likely we are approaching the time when "land-use control," as determined by a master plan of future distribution and intensity of different land uses, will be more realistically tied up with financial values and obligations. Within an enveloping urban economic pattern and controls, adjusted to human needs, and adjusted to the technological facilities for meeting those needs, the place of housing in urban reconstruction is a positive one. Personally, I am not particularly disappointed that the forms and locations of that housing are not clearly and finally crystallized. I hope they never may become too rigidly set, although I suspect that more or less standardization of some of the patterns of housing may be a necessary incident to the modern equivalent of tribal living.

I am not implying or recommending a waiting policy. If we are going to do anything at all, comprehensively, with our cities, we shall want to push forward particularly in what we now refer to as the "post-emergency period." That may be a period of serious stresses and strains, conflicting emotional reactions and pressures, gropings for immediate practical measures no matter what the later penalties of wrong moves may threaten to be. I should like to see that world not one of frantic patching, not one of hopeless inertia, but a world of well-executed constructive action, wisely conceived now while we have time to think—while it is still possible to think of fundamentals.

Housing and Blighted Areas—A Report to the National Association of Real Estate Boards

ARTHUR BINNS, Philadelphia, Pennsylvania

IN ORDER to assist cities in the rebuilding of deteriorated and blighted areas which are an ever-increasing menace to the soundness of urban life, it is believed that the Federal Government should have the right to acquire land by eminent domain and purchase in such areas and to lease or sell such land to private limited dividend Redevelopment Companies operating under the supervision of FHA.

Legislation Necessary

1. An act by Congress which would enable the Federal Loan Agency, when requested by a city, to purchase or to acquire by eminent domain land in deteriorated or blighted urban areas and to lease or sell such land to private limited dividend Redevelopment Companies, supervised by FHA, for the purpose of having such areas rebuilt in accordance with sound and approved city plans. Such rebuilding would consist in large part of housing, including low-cost housing.

2. An appropriation from Congress to the Federal Loan Agency for the above purpose in the amount of $50,000,000 with which to undertake the necessary experimental activities.

3. An amendment to the Federal Revenue Act would establish 3½ percent as the depreciation to be allowed on all investments of a Redevelopment Company in rehabilitation or new improvements.

The Redevelopment Companies

1. Private limited dividend Redevelopment Companies for the rebuilding of blighted areas can be organized under Section 207 of the National Housing Act. The charters of such Companies can be prescribed by the Administrator of FHA under existing law, and such charters can then be issued by the state governments.

2. The Charter of each such Redevelopment Company would set forth the area in which it would be permitted to function. Such area would be approved by the city and its city planning commission as well as by the Administrator of FHA. The area need not be wholly contiguous, since it might be desirable for the Redevelopment Company to have land available for the removal and relocation of non-conforming uses under the new plan of redevelopment, such as manufacturing, which should be removed from an area which it is proposed to make solely residential.

3. When a Redevelopment Company has been chartered by the State and the area in which it proposes to operate has been approved by the Administrator of FHA and the city planning commission, it shall present to the Administrator a plan for the redevelopment of the area. Such plan of redevelopment should be in accordance with the

needs of the community and the charter of the neighborhood and while it should include low-cost and other housing, other suitable improvements should be included so as to provide a sound and well-balanced operating or neighborhood unit. When this plan has been approved by the Administrator, the Federal Loan Agency would proceed to acquire by purchase or eminent domain all of the land necessary. This land would then be sold to the Redevelopment Company under a lease-purchase arrangement which would run for not more than fifty years.

4. The FHA can under existing legislation insure a mortgage of ninety percent of the appraised value of the land and new improvements of such a Redevelopment Company with the proviso that the total mortgage may not in any event exceed the total value of the improvements.

5. The sale of the land by the Federal Loan Agency to the Redevelopment Company should be made under a lease-purchase agreement under which the Company could pay 10 percent of its gross income from all sources each year to cover both interest and payments on the purchase price of the land. The price of the land should be the Federal Loan Agency's actual audited cost of acquisition. Of the payments made by the Redevelopment Company each year, 2½ percent on the cost of the land should be credited to the interest account and the remainder upon the outstanding principal. It is believed that this arrangement, which adjusts the costs of land purchase directly to earnings, would enable the Company to pass through its early development period successfully. It is believed also that even though the land acquisition cost be not in excess of the current use value of the land, the low interest rate plus the long period of payments on the capital account would enable the Redevelopment Company to perform on its contract. Moreover, as the mortgage insured by FHA is progressively reduced, the Redevelopment Company would increase its annual payments to the Federal Loan Agency on the land.

6. The Redevelopment Company should be required to have equity capital in the amount of 10 percent of the improvements which it is proposed to build upon the land. Such improvements would include rehabilitation as well as new structures.

7. The Redevelopment Company would pay normal local taxes on its leasehold and its improvements.

8. After taxes and operating costs, the Redevelopment Company would make its payments on the first mortgage insured by FHA, after which 10 percent of the gross income would be paid on the lease-purchase agreement with the Federal Loan Agency. After such payments from gross income and creation of prudent reserves, the common stock of the Redevelopment Company would be permitted to earn dividends of not more than 8 percent in any one year. Any earnings in excess of

this amount would be applied on further reduction of the principal debt for land to the Federal Loan Agency.

9. The Redevelopment Company would under its Charter be free to buy, sell, lease, or rent property under its control in accordance with the general plan approved by the city, the city planning commission, and the Administrator of FHA. Provided its operations are sound, the Company would be free of prescribed rentals or prices and would conduct its operations in accordance with market conditions.

10. It would be the object of the Company to sell as many homes and other types of property as possible to individual private owners, thus gradually eliminating itself. It is not the purpose of this plan to create permanent large corporate owners of urban land and improvements.

11. The Redevelopment Company would develop such restrictions in its deeds of sale and such general controls through a continuing maintenance organization as to preserve the character of its neighborhood even after a large share of its property has passed from the hands of the Redevelopment Company into individual private ownership.

12. An arrangement should be worked out releasing from the general mortgage or mortgages negotiated by the Redevelopment Company property sold to an acceptable individual owner of a home or other type of property.

13. The Charters of the Redevelopment Companies would contain appropriate provisions to prevent abuses of the privileges or powers granted.

Advantages

1. From seven to nine dollars of private money for every dollar of government money.

2. Complete ultimate repayment, with interest, of all government advances, assuming that the insurance fee of FHA covers its cost of administration.

3. Redevelopment of blighted areas in accordance with sound city plans and with varied development, in accordance with best use.

4. Rebuilding of American cities in their new cycle of redevelopment.

5. An outlet for billions of insurance and fiduciary funds.

6. A great business and employment buffer to cushion the post-emergency shock.

7. No special privileges to any one group of citizens through tax exemption.

Discussion

JACOB CRANE, Planning Consultant; Assistant Coördinator of Defense Housing, Washington, D. C.

IN THE defense housing program the planners have all the fun and none of the grief. It is relatively easy to outline the sound principles of relating defense housing projects to planned community development. But the construction agencies, public and private, face the three somewhat contradictory sets of criteria by which the success of defense housing is measured.

First, the defense agencies, particularly the Army and Navy, demand the utmost speed, and of course they are right in making this demand. They very properly feel they cannot wait for the organization and application of all the planning principles in situations where local planning is weak and where they must have the houses immediately.

Second, the Congress has established cost limits, and demands every reasonable economy in defense housing. This attitude reflects in part the experience of World War I, in part the pressures for economy in public housing during recent years, in part the misunderstandings arising from overly-advertised schemes for cheap housing, and in part the desire to obviate waste in the great national defense effort.

Third, the planners of all categories want the defense housing projects to be done well, and to be carefully related to planned local development. Of course this is also a sound point of view.

As a result, the construction agencies are struggling desperately to meet these three sets of criteria, and it is no wonder that they cannot meet all of them perfectly. The adopted planning standards and physical standards for defense housing are drawn from the standards of peacetime housing work, with full emphasis on relationship to local planning and to local planning agencies; and constant effort is made to strengthen this relationship. On this problem, as on so many of our problems, the basic necessity is for strong, active, wise local planning activity, and for the recognition of local planning by the Federal agencies.

As the defense program itself expands, the defense housing program also expands and the importance of these principles increases. During the immediate future, the greater and greater magnitude of the defense housing program will require every ounce of intelligence and every ounce of goodwill and coöperation that we can muster, toward the objective of making defense housing serve the immediate need and also serve the long-range need of American communities for decent housing well related to planned development.

MRS. SAMUEL I. ROSENMAN, Chairman, National Committee on Housing Emergency, New York

I trust, Mr. Palmer, that in the amplification of the present defense housing program which you envisage for next year there will be full public understanding and support for the component parts necessary to your program. I trust that while money is being spent for this program it will be used so as to produce housing which will meet the present emergency need and the permanent need wherever the two are, by coincidence, telescoped. While large sums are being expended it is prudent that they should be spent so as to procure the greatest benefit to serve the greatest length of time.

Mr. Augur points to the fact that no one questions the cost of weapons and demands, as in housing, that cheap weapons be produced. Perhaps the cost of weapons is not questioned because the manufacture of implements has not, in the past, been based upon an economic outlook which is anchored upon a tradition of speculation. The tradition of industry is that of investment and return.

The task before us is one of education. Investors and realtors must learn to regard housing as an area of investment. When housing becomes a recognized field for investment and return on investment, the popular conception of mulcting the public will be dissipated. There will not be such scepticism about the cost of housing among the public and in legislative halls.

Mr. Ihlder visualizes an over-all housing program which must cover at least sixty years. In pursuing this program it must be made clear to mayors and officials of local governments throughout the Nation that they must juggle their presently distorted finances with one eye on their necessary budgets and the other eye on the future budgets of their cities. They must learn to appreciate the very real fact that their budgets are inversely affected by the expense of the increasing cost of decaying blighted areas. Short-sighted programs must be discouraged, and far-sighted programs encouraged.

Mr. Bigger decries the habit we have formed of thinking of our cities in isolated, unrelated parts. He decries the lack of comprehensive vision. I am afraid that habit will continue until planning boards are given wide public recognition and dignity. Thinking in parts will continue until the value of planning boards is recognized by insurance companies, banks and other depositories of semi-public and private funds. Today, the planning board is considered by many an obstacle to circumvent instead of a guidepost with which to coöperate.

Thinking in parts will continue until public housers also recognize the housing problems of other income groups, and until private enterprise joins with public enterprise in planning and providing housing for all income groups and the revitalization of all debilitated urban areas.

Mr. Binns points out quite correctly that public enterprise can exist only upon the structure of private enterprise. This is a whole-hearted reference to the need of private enterprise in which I join; but the reference to the need of public enterprise is just insinuated in this statement. I do wish that Mr. Binns could go the whole hog.

I, personally, believe that the plan of the National Real Estate Board has within it a germ of an idea. I believe that the premise that land is a public utility is well taken. The plan is based upon the coöperation of government and private enterprise. Such coöperation is most desirable. But the plan carries a government subsidy, and while there is not sufficient time to discuss it here, I would just like to point out one thing. Let us condemn it universally or find its value with open-mindedness.

COLEMAN WOODBURY, National Association of Housing Officials, Chicago, Ill.

Defense housing must be planned and programmed in the light of all available and reliable facts about needs, duration, and location. That is the primary job of the Division of Defense Housing Coördination and on it very considerable progress has been made. The country over, however, the present job of housing and planning agencies is not how to discourage and slow down building in defense areas but how to produce more and still more housing, and more economical housing, more quickly. With the bulk of expenditures for national defense still coming up, it is simply foolish as well as dangerous to think, to say, or to imply that the brakes should be put on defense housing construction now or in the near future.

Let me point out a characteristic of present and future defense housing needs. By and large these projects will be spreading over the country, particularly in established industrial areas. Probably we will hear much less about spectacular shortages in overrun villages like Charlestown, Indiana. Proportionately more of the need will be felt in Pittsburgh, Philadelphia, Baltimore, Detroit, Birmingham, Cincinnati, Hartford, and similar industrial centers. It will merge with the natural and accumulated housing needs in those areas. Although these facts have their advantages for defense housing officials, they increase the difficulties of making other officials and citizens realize the scope and seriousness of the need.

In rejoinder to all this, it is customary to say that we housers and planners don't realize how sensitive the real estate market is, how much of individual and institutional savings is invested in urban real estate, and how serious would be an overbuilt housing market when, as, and if industrial defense activity returns to normal or at least falls off sharply from present levels. To this there are two replies, which really supplement one another. First, however serious such dislocations might be, they would be much less disruptive to our economy and to our way of life, actual and ideal, than would be "too little and too late" rearma-

ment, which could be caused in part by a narrow and shortsighted defense housing program. Second, we not only wish to avoid disrupting local real estate markets, but we also have a practical way of protecting them after the defense emergency shall have passed or at least declined. This procedure is based on the fact that no defense locality is really oversupplied with housing as long as the number of new defense houses that might become vacant is less than the number of unfit, substandard houses now occupied in that locality. Mr. Ihlder suggested this analysis but let me develop it.

If defense housing is merely built in a hurry and sold off in a hurry during some future, back-to-normalcy hysteria, some good residential real estate undoubtedly would be hurt and hurt badly. If, however, the extra defense housing were in the hands of, or should be turned over to, local housing authorities or similar agencies, if moderate Federal and local subsidies were added to bring rents within the reach of families now in slum and seriously blighted areas, the picture would be entirely changed. Families could be moved out of the substandard to the erstwhile defense housing with substantial gains not only to themselves but to the community at large. The substandard buildings could be torn down and the land made available for private redevelopment for other than low-income housing or sold at reasonable prices for parks, playgrounds, parking lots, or other public purposes. New opportunities thus would be presented both to private and to public enterprise in the post-emergency period. The worst sources of creeping blight would be removed. Although the process might decentralize urban populations somewhat, it could be a rational and planned decentralization that in the long run would make the cities affected much more livable and thus help to prevent the headlong flight to outlying areas, which now leads so often to more blight, the deterioration of established districts, the creation of suburban slums, and threatens many municipalities with bankruptcy.

This leads to my final point—the need now for realistic but fearless planning for the period after the defense housing program, as well as during it. We need both physical and administrative planning; planning for the best locations of defense housing and for the most rational re-use of existing slum and blighted areas after the offending housing shall have been removed; planning for the effective administration of housing codes that are essential to the clearance of substandard housing areas.

No sizeable community directly affected by defense activities has any right to be complacent or timid about its housing programs for defense and for the post-emergency period, whenever or whatever that may be. On the other hand, the actual conditions of today and the probable developments of tomorrow give planners and housers a fine chance to turn at least some of the uncertainties and wastes of war into the security and creativeness of decent, livable peace time communities.

The Federal City in 1941

IT IS estimated that during the past two years, since the taking of the 1940 Census, the population of the Washington Metropolitan Area has increased by 210,000, bringing the total to 1,200,000 on January 1, 1942, with increases of about 20,000 coming in each month—10,000 into the District and 10,000 into the outer metropolitan area.

Starting with a population of 14,000 in 1800, the District of Columbia had reached 230 odd thousand by 1900. The population had more than doubled in the 30 years from 1900–1930 and nearly trebled in the 40 years from 1900–1940.

In the past two years the population of the District of Columbia has undoubtedly increased by at least 16 percent over the 1940 figure and at the present rate of increase nearly two percent is being added every month. This sudden accession of population has placed a great strain on existing facilities—office space, housing, transportation, and outdoor recreational opportunities.

It may be recalled that in downtown Washington we walk the streets and sit in the open squares planned by L'Enfant. We drive past the Executive Mansion which still preserves the framework of the President's House first occupied by the Madisons in 1800, though the restoration after the disastrous fires of the War of 1812 did not exactly duplicate the original structure. The dome of the Capitol, completed during the Civil War, crowns the Central Building, the cornerstone of which was laid by President Washington in 1793. The fires of the War of 1812 gutted the interiors of the North and South wings (completed in 1800 and 1811), but the damage was immediately repaired and the central portion of the Capitol, commenced in 1818, was completed in 1827.

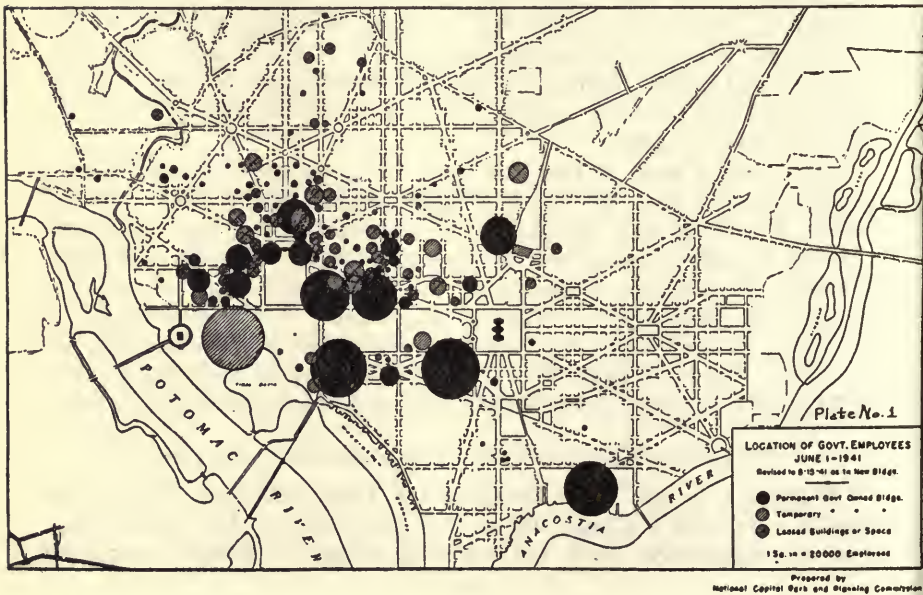
The Mall, a part of the L'Enfant Plan, neglected for a hundred years, was replanned by the McMillan Commission of 1901. During World War I, it was occupied by many temporary office buildings. Two of the more permanent of these temporary structures still stand between Constitution Avenue and the Reflecting Basin, in the immediate foreground of the Lincoln Memorial. In the last decade a great deal of money has been spent to realize the ambitious plans for the Mall. But now that World War II is upon us, temporary office buildings have sprung up like mushrooms in the Mall and Potomac Park.

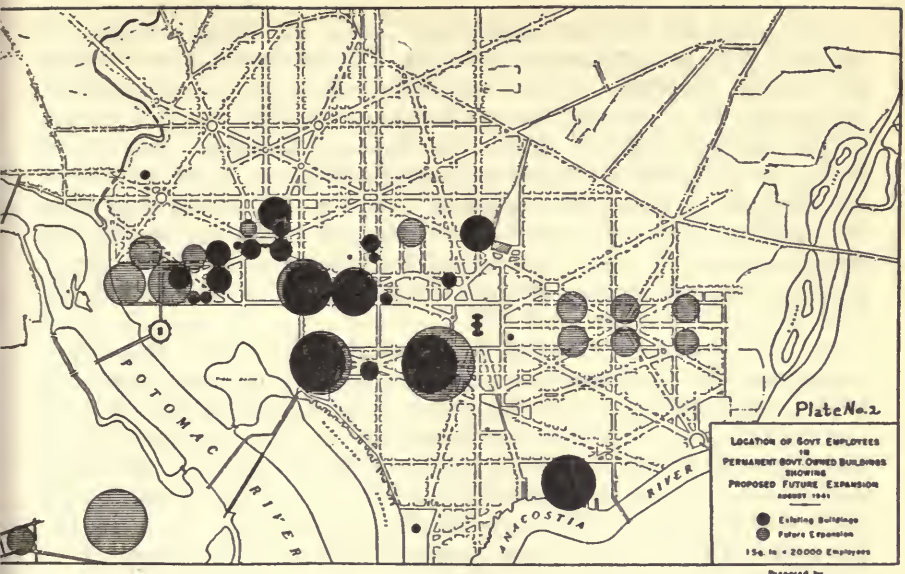
National Capital Park and Planning Commission

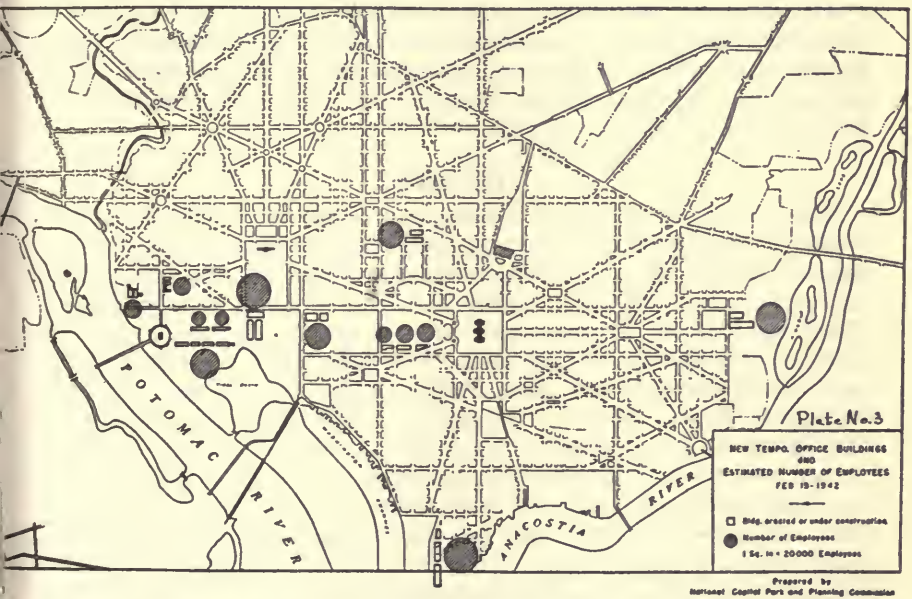
Beginning in the early twenties the then American Civic Association organized a Committee of One Hundred on the Federal City, and in coöperation with the national technical groups, sponsored

legislation for a Comprehensive Plan for Washington and environs. The park-purchase Gibson-Ball bill was passed by Congress in 1924 and amended in 1926 by the Capper-Gibson bill to create the National Capital Park and Planning Commission, which has now been serving the Federal City for 16 years.

During 1941, the Commission published a Public Buildings Plan, drawn up under the supervision of John Nolen, Jr., Director of Planning. This plan preserved the spirit of the L'Enfant and McMillan plans, but reflected needs not anticipated in 1791 or in 1900. The 1941 plan provides space for permanent office buildings to house nearly 200,000 workers (See Planning and Civic Comment, October, 1941). When it is recalled that in 1915 there were about 35,000 government employees working in Washington, with a peak of 117,760 on November 11, 1918, a low of less than 60,000 in 1926, and about 65,000 in 1933 the Public Buildings Plan would seem to offer ample provision for all peacetime and most of wartime needs. Spot map Plate No. 1, shows office space and capacity of existing government buildings as of August, 1941. The second spot map, Plate No. 2 shows proposals for future expansions. On this spot map is shown the new War Department Building in Arlington, which is to be converted after the war into a storage depot. For the duration of the war at least this building will provide space for from 20,000 to 35,000 government workers. Thus it can be seen that it must be taken into account in the future public building program. The location and size of the War Department Building is forcing the expenditure of many millions of dollars in order to







provide adequate highway approaches and it is the opinion of those who have studied the situation that additional bridge or tunnel accommodations across the Potomac will be needed to carry the vast traffic to and from the building.

The plans for the new permanent public buildings proposed by the National Capital Park and Planning Commission will provide sites for Federal Buildings which eventually will stretch across a four-mile swath from the Potomac to the Anacostia Rivers. The number of government employees in the so-called central business district will in time be reduced from 21,000 to 7,000 (by reason of the abandonment of leased private office buildings). The extension of government building sites east and west will serve to distribute the traffic by avenues and streets actually to relieve the central business district and the streets leading to it, since much of the traffic can then by-pass the downtown district altogether.

It will be seen on the spot map Plate No. 3 that the location of temporary office buildings has tended to congest the very avenues of traffic which are already overcrowded. The encroachments on park and mall land were agreed to reluctantly by the National Capital Park and Planning Commission, but, in view of the fact that outdoor recreation facilities in the central district are decreasing so rapidly, the National Capital Parks, through the National Park Service in the Department of the Interior, has protested further encroachments on parks unless it can be shown that there is no other alternative.

Certainly for permanent public buildings, and in some degree for temporary buildings, radical departures from well-considered plans, though they may have some advantages, nearly always entail many unforeseen complications and usually cause new and undesirable dislocations in a sound land-use plan.

Housing

The housing situation in Washington is closely related to the increase in population and the augmented government employees contingent working in the publicly owned and leased office space now occupied by the Federal government. Private enterprise has supplied Washington during the past two decades with many new homes for families in middle and upper income brackets. As for public housing, even before World War I, Mrs. Archibald Hopkins and the first Mrs. Woodrow Wilson sponsored legislation which Congress adopted to abolish the alley dwellings of Washington. But before much was accomplished, the war pressure of population was so great that a ruling on when an alley was not an alley allowed the alley dwellings to remain. Finally, when the war was over, after prolonged efforts, the Alley Dwelling Act was passed by Congress and President Roosevelt created the existing Alley Dwelling Authority, which, in its early years was definitely a slum reclamation project. As stated by John Ihlder, Executive Officer, the provision of low-cost or low-rental housing was incidental to its main purpose of ridding the city of rot spots.

Under Title I of the Act, the Alley Dwelling Authority erected and

remodeled self-supporting housing projects in which the rents charged cover all costs, including city taxes. When a permanent policy of housing was inaugurated in 1937, the Alley Dwelling Authority became the local housing authority to operate in coöperation with the United States Housing Authority. In 1940 the Alley Dwelling Authority leased from the United States Housing Authority the Langston project which had been erected by the Public Works Authority, financed on the basis of a 45 percent write-off on construction cost. The ADA has continued the policy of USHA to charge rentals designed to cover only maintenance, repairs, operation and administration. But on all the other USHA financed projects, administered by the ADA in the District, a 1940 agreement provides for a system of graded rents which will ensure a sound economic set-up for all who can afford to pay economic rents, with the subsidy going in the degree needed to families whose income will not permit payment of the full amount. By the end of 1941, the ADA had erected 112 dwelling units under Title I, 1339 units under Title II and had leased the 1274 units of the Langston project from USHA. The Defense Housing Program for 1941 consisted of 550 units.

During 1941, a total of 23,524 homes and 1,000 dormitory units were built or were in process of construction at the end of the year by private enterprise and various public agencies. But existing and promised future congestion indicates need for more living quarters. The appropriation of $50,000,000 which was expected to be included in the Lanham Bill was finally omitted; but in response to the public demand, a new Lanham Bill was introduced on February 23, 1942, especially to make provision for housing and facilities in the District. By the end of 1941, about 14,000 private housing units had received or had pending priorities for construction in 1942, distributed as follows: District of Columbia, 4900; Montgomery, Prince Georges and Charles Cos., Maryland, 3770; Alexandria City, Arlington and Fairfax Counties, Virginia, 4900.

There was prepared in 1941 and issued at the turn of the year a proposal by Arthur Goodwillie, Director of the Conservation Service of the Home Owners' Loan Corporation, for the Rehabilitation of Southwest Washington as a war housing measure. The Alley Dwelling Authority, the Commissioners of the District of Columbia, the Division of Defense Housing Coördination, the Federal Works Agency, Howard University, the National Capital Park and Planning Commission, the National Youth Administration and the Washington Housing Association all gave assistance in preparing the report.

The entire neighborhood covers 85 squares lying southwest of the Capitol and includes the old town of Carrollsburgh which had been in existence for 20 years before the site of the Federal City was selected in 1791. In the early days of the Republic many eminent persons built houses in the area, which now, with its well-shaped streets, sewers,

sidewalks and pavements paid for and well maintained, forms an ideal setting for a residence neighborhood. Many of the existing brick buildings could be salvaged and remodeled. Decrepit frame structures should be demolished. There is ample opportunity for a well-planned slum reclamation project. There are accessible new junior high schools for both white and negro children, a good elementary school, neighborhood houses and churches now in existence. In the report it is stated that if the entire neighborhood were improved it would be conveniently accessible to some 60,000 government workers south of the Mall and west of the Capitol and not far from the offices of some 30,000 more north of the Mall.

The proposed initial project would cover nine blocks, comprising some 35 acres. As laid out, the nine blocks in the project (as well as the other 76 blocks in the balance of the Southwest neighborhood) have unusually large interiors. In these there are numerous substandard, unsanitary, overcrowded alley dwellings. The space in alleys could be reduced in replanning and play courts and open spaces provided. It is estimated that the average reconditioning cost would be $352 per room, the acquisition cost of salvaged rooms $410, site improvement $31, making a total cost per room for the remodeled houses of $793. The average cost per room in new buildings would probably run to $1127.

The National Capital Park and Planning Commission has approved the plan in theory if a way can be found to house the present population living in the project area during the course of construction and remodeling.

Highways

During the year the Department of Highways of the District of Columbia, in coöperation with the D. C. Department of Vehicles and Traffic and the U. S. Public Roads Administration, issued a report recommending a long-range plan of street widenings, extensions and bridge and tunnel connections across the Potomac to connect with Virginia and the South. The recommendations for off-street parking of automobiles were implemented by Act of Congress, approved February 18, 1942, setting up a Motor Vehicle Parking Agency with three *ex officio* and four citizen members to acquire, develop and operate off-street parking facilities.

In 1941 the National Capital Park and Planning Commission issued a map showing the present and proposed regional thoroughfare network for Washington. Now that the land has been acquired for the long-contemplated Fort Drive, connecting the old Civil War fortifications around the city, it is planned to make this Drive part of a circumferential parkway system around Washington. The western link would be part of the proposed George Washington Memorial Drive

in Maryland, connecting the Mount Vernon Memorial Parkway with Great Falls. Constitution Avenue would form the southern link. A gap would be closed in the Columbia Pike, which, with entirely new northern and western by-pass roads, would permit motorists from Baltimore (via Ellicott City) to drive around the city of Washington about four miles farther out than the Fort Drive and connect some fifteen miles southwest of Washington with Highway Number 1 for Richmond. A parkway would be constructed from the Mall, south across the Anacostia and along the east bank of the Potomac to Fort Washington and on to connect with the Dahlgren Bridge which at present is not much used because of inadequate approaches. Motorists from Baltimore, coming in by the Washington-Baltimore Boulevard, or by the proposed Washington-Baltimore Parkway through the National Agricultural Research grounds, or by the Baltimore Harbor crossing road (which will be brought into Washington by New York Avenue Extended) could travel either by the proposed Anacostia Parkway or the proposed Fort Drive into the Fort Washington Parkway to make this same connection with the South. The Eastern By-pass, some five miles farther out than the Fort Drive, also would connect the New York Avenue Extended highway with the Dahlgren Bridge road.

The map will make apparent to anyone at all familiar with Washington that these proposed highways and parkways would furnish connected radials at convenient intervals and at least three principal circumferential routes for the Washington Region, with a liberal choice of routes by which Washington may be by-passed by through travelers who do not wish to become entangled in Washington's congested downtown streets.

Recreation

The National Capital Park and Planning Commission has consistently purchased areas for the park, parkway and playground system planned by the Commission and accelerated by the provisions of the Capper-Cramton Act. Many of these areas are as yet unimproved due to lack of funds. With the occupation of so much space in Potomac Park and the Mall by temporary buildings and parking space, Milo Christiansen, Acting Coördinator of Recreation, presented to the National Capital Park and Planning Commission a Report showing that more than 100 recreational facilities which in 1941 were used by 285,000 persons, not including spectators, have been abandoned because of the temporary buildings and parking spaces, which now occupy the space used for tennis courts, soft ball, baseball and volleyball fields. The Office of National Capital Parks has requested an appropriation of $1,000,000 to develop recreational facilities on land already acquired to meet the needs of the growing population during the long summer season and especially to replace the facilities which have been withdrawn from use.

The importance of planning should be recognized by adequate appropriations for comprehensive planning *per se*. This means that an adequate technical staff is absolutely essential, if plans are to be kept up to date and published for the benefit of the public. The staff should also be large enough to be in a position to study and report promptly on all proposals brought to the commission by departmental officials.

Planning Principles Applied to the Federal City

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EDITOR'S NOTE.—On February 4, 1942, at the invitation of the Committee of One Hundred on the Federal City, of the American Planning and Civic Association, Mr. Bettman addressed a luncheon meeting in Washington. He spoke without notes. We are glad to present an informal transcript of the gist of his remarks.

I LIKE to work from a general concept, making adaptations from the normal in a place with peculiar problems such as the District of Columbia. First comes the formal concept and then the adjustments of the general concept to the particular situation.

In providing for the physical development of a place some technique must be used which will bring about efficiency through timing and placing—based on some recognition of mutual interrelationships. The interrelationships are obvious. The location of a school or playground, for example, should have a relationship to the residential neighborhood. The same applies to the location of streets; there must be the type of street to make the neighborhood, rather than mar it. It must suit the purposes of the neighborhood. The same applies to the location of defense projects; the streets should be so planned as to protect the area for defense work, if that is what is to be there, and so planned as not to mar the site for other purposes, if it is to be used for other purposes. It is the efficient thing to do to provide for these interrelationships.

The unit of planning is the territory, not any particular governmental level. The public building will make or mar the area, whether it is a Federal, state, county or city public building. A highway will build up or destroy or accelerate development, whether it is a Federal, state, county or city highway. It therefore follows that planning is essentially concerned with private as much as with public uses of the land. These two uses interact on each other. Consequently, functions affecting the private use of land, such as zoning, cannot be separated from the public uses, such as the planning of streets and public buildings. It is important that zoning and planning of public buildings be interrelated. The separation of planning for public purposes from planning for private purposes is unfortunate; the two things should be worked out together, not separately.

It is the master or comprehensive plan of all the various types of land uses within the territory of the community which is a necessary instrument of coördination, if that coördination is to be brought about by anything approaching a scientific method. The method of coördination or integration through the mere exchange of ideas of the various administrative officials in charge of different classes of public works and public uses might represent some improvement in administrative techniques; but, unless something in the nature of what we call a master plan and the factors and principles of master or comprehensive planning be brought to bear upon the process of programming public works, that program will be lacking in the most valuable criteria for determining the placing and the timing.

When a new recreation place, a new public building or any such thing is to be built, the planning agency should have this project referred to it, by way of checking up with the major plan. The planning agency can also act as educator to put over with the public this concept. One can make a concept effective only through having somebody who is responsible for it—whose "baby" it is. Unless there is an agency whose peculiar function is the realization of an interrelationship—thinking in terms of the future—you will not have much city planning.

Who should be on the planning commission? In the past there have been two ideas as to the composition of a planning agency, both represented by rather typical planning legislation on the statute books of the country. One idea is built on the Standard City Planning Act; the Ohio statute is on this type. One idea is that the planning agency should be wholly or predominantly composed of fine, unpaid citizens. So far we are all conscious of a certain disappointment in the effectiveness of that type of agency. So important, so vital is planning, so much is it a daily matter, that there needs to be in the agency developing the planning a continuity of effort which it is, perhaps, impossible to expect of a citizen. In my work in Puerto Rico and in connection with the planning set-up proposed for Region V of the NRPB, I have been thinking out this matter of membership with the idea of developing a fresh viewpoint. In the proposed bills for these two set-ups, I have proposed a paid commission, consisting of a full-time chairman, and part-time associates, who would be paid for their part time, the chairman to be both the chief executive of the commission and the presiding officer, and also the chief spokesman before the public and the governmental agencies. New York City is experimenting with this sort of set-up, and other cities are trying out similar arrangements.

It is a peculiar, paradoxical thing that when one enters the Nation's Capital, all sorts of sectional feelings are strong. When I worked in Maryland, I was told that on no account was money to be expended, on a district here in Montgomery County and Prince Georges County, from the Montgomery County funds for use in the Prince Georges County

part of the district. There is the greatest amount of sectional feeling around Washington.

It is highly important that there be systematic contact and coöperation between the planning agency and the executive and administrative officials. This is for the reason that in the process of developing the comprehensive planning or passing upon specific proposals for the location of specific public improvements, the planning agency be educated in the factors and considerations which the administrative and legislative officials know about; likewise it is highly important that the administrative and legislative officials receive education on the concept, purposes and possibilities of comprehensive planning. Consequently, in considering the composition of the planning agency and its procedures, the problem of bringing about this systematic contact and coöperation is of the highest importance.

Owing to the large number of legislative and executive officials or organs in the District of Columbia, the planning body would become unwieldy if its membership included the representatives of all of these. Usually in American cities there is a single chief executive, either elective or appointive, and a small council which meets all the year round, and all of these bodies and officials, legislative, administrative and planning, have their habitat in the city hall, and the problem therefore is easily solved by placing one member of the council and the chief executive on the planning board. No such easy solution is possible for Washington, for there the chief legislative body is the large bicameral Congress, and there are District bodies, as for instance, the Zoning Commission, which may be said to be legislative organs for certain aspects of the government of the city. Then there are the innumerable Federal and District administrative bodies and officials which locate and erect public buildings and improvements of the many functional types and classes, and the chief executive official is the President of the United States, who would certainly not have time for membership on the planning agency.

These facts point to the desirability of giving favorable consideration to the small planning board type of planning agency all the members of which do not hold other public office. By itself that would leave the problem of the systematic contacts between the planning and the administrative and legislative agencies unsolved. One method of dealing with this would be the creation of a coördinating committee composed of representatives of all the relevant legislative and administrative organs, the planning agency and the coördinating committee to establish regular and systematic relationships and meetings. That would be a more elastic system than one in which a few selected legislative and administrative officials are members of the planning agency; for the coordinating committee could be varied in its membership according to the variances in the nature of the problems under discussion.

There is no need for entering into great detail as to the particular

administrative and legislative representations on the planning agency or the auxiliary coördinating committee. There should of course be one member from each of the two Houses of Congress. There should also be a representative of the District Commissioners, preferably the Engineer Commissioner. Certainly there should be a representative or representatives of the Federal Agencies which have charge of public buildings and parks and other recreational spaces. In view of the close relationship between planning and capital budgeting, it would be well to consider representation of the Bureau of the Budget.

So far we have dealt largely with the composition of the planning agency. On the subject of the powers of the planning agency, the main question may be said to be what its part should be in the actual determinations of the locations of specific improvements and uses as they come to be determined from day to day, week to week, and year to year; in other words, how give the general comprehensive plan and the comprehensive planning point of view an active part in the process of arriving at decisions and determinations of the locations of specific public structures and uses. In the traditional form of planning legislation in this country, there is the requirement that before any public structure, improvement or use is determined upon, the proposal shall be submitted to the planning agency, and if the planning agency disapproves, the overruling of this disapproval should require the vote of two-thirds of the legislative body. The object of this is to assure that the planning commission's point of view and the planning factors which the planning commission reports upon shall actually be considered before the final decision is made. That device is hardly appropriate to Washington, in view of the fact that the Congress is the chief legislative organ. Nor could anyone propose that the overburdened President of the United States be drawn into every disagreement regarding the location of buildings or projects or every dispute about zoning amendments. It would be well to go as far as requiring that in the case of every proposed new or relocated public structure and use and every proposed zoning change, the proposal shall be submitted to the planning commission, and the report of the planning commission shall be received and considered by the particular legislative or administrative organ which is to make the final determination; and that if that final determination departs from the recommendation of the planning commission, the determining official or body shall officially state its reasons for the departure.

The function of the planning commission is of the highest importance to the soundness of the development of the City of Washington and the welfare of those who live, sojourn and work there. City planning is a special art, and the planning agency needs an adequate technical staff and should be afforded adequate funds. The skimpiness of appropriations in our cities for the operations of the planning agency in the performance

of the comprehensive planning function is a terrific mistake and means tremendous losses, both material and social.

There can be no doubt that the total appropriation for the planning commission is an absurdly insignificant percentage of the capital outlay in Washington for streets, parks, public buildings and other public capital purposes.

There should be more frequent and systematic coöperation between the National Capital Park and Planning Commission and the corresponding planning commissions of the Maryland and Virginia portions of the metropolitan area, and out of this it may be hoped in time that a metropolitan planning commission will develop for the whole metropolitan area.

The jurisdiction which the National Capital Park and Planning Commission has over the actual acquisition of lands for parks is obviously a purely administrative, as distinguished from planning, function. It is in general a sound principle that a planning agency should not have that partiality for a specific functional type of improvement and use, such as parks, which is apt to be present, however unconsciously, when the planning agency is given an administrative part to perform. While this is a sound principle in general, in the case of the National Capital Park and Planning Commission there are good grounds for continuing its present jurisdiction over the acquisition of properties for parks. This has worked so well and there is such general satisfaction that it would be well to continue this jurisdiction. However, in its internal staff organization, there should be a considerable degree of segregation of the two types of functions, that is, a considerable segregation of the staff devoted to planning from the staff whose task is that of the acquisition of the park lands.

Editor's Comments on Proposed Reorganization of National Capital Park and Planning Commission

There seems to be some diversity of opinion concerning the composition of the National Capital Park and Planning Commission. At present the Commission is composed of four citizens well experienced in city planning, appointed by the President, one of whom shall be a resident of the District of Columbia, and six *ex-officio* members. These are the Engineer Commissioner of the District of Columbia, the Chief of Engineers of the Army, the Director of the National Park Service, the Chief of the U. S. Forest Service, and the Chairmen of the District Committees of the House and Senate. Originally the Director of Public Parks and Public Buildings was a member and executive officer of the Commission, but in 1933 this position was abolished. The Public Parks were transferred to the National Park Service. One major difficulty which has been found in the *ex-officio* members has been irregular attendance, and the designation of representatives, often different ones

at different times. Since one of the important functions of the Commission is to decide on matters of policy, a constantly changing personnel interferes with continuity of policy and proves unduly time-consuming in the deliberations of the Commission.

There are those who believe generally in the exclusively citizen commission of three or five members. This sort of commission is particularly difficult to form in the Federal City unless, as now, the members may be selected from the country at large. It is highly desirable that the citizens on the commission be professional leaders with wide experience, not in the employ of the Federal or District Governments. Since the principal industry in Washington is Government, those in private professional practice are not numerous. It seems highly important, therefore, to be able to call upon distinguished citizens with wide experience from the country at large. This makes it all the more important that some *ex-officio* members be placed on the Commission proper—at least the Engineer Commissioner of the District of Columbia, the Director or Associate Director of the National Park Service and the Chairmen of the House and Senate District Committees in Congress. Some students of planning believe that all of the principal officials whose field of action falls within the scope of the plans of the Commission should be members of it; others that there should be organized by the Commission a Coördinating Board which would include these officials. Whether on the Commission or on a Coördinating Board, these officials might include the U. S. Commissioner of Public Roads, the Director of the Alley Dwelling Authority, the officer in charge of Federal public buildings, the officer in the Corps of Engineers in the Army in charge of public works in the District.

The citizen members of the existing Commission are unpaid. Conversations with them would indicate that they generally favor unpaid members of the Commission. There is some opinion in favor of paid members of the Commission, or at least a paid Chairman. A compromise would be a per diem or honorarium for days of actual service plus, as now, expenses incurred in attendance at Commission meetings. Arguments for paid chairman or commissioners are that full-time service is desirable. Arguments against paid commissioners are that more experienced and higher calibre members can be secured if they are not obliged to terminate their other affairs and devote full time to the Commission. Compensation for commissioners has been known to stimulate political pressure to secure appointments of entirely unqualified members. Many students of planning believe that adequate appropriations for the technical staff, working under the general direction of the Commission, will bring better results than the appointment of highly-paid commissioners who might find it difficult to secure a budget which would also include adequate provision for the technical staff.

The Role of Regionalism and the Regional Council in National Planning

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REGIONALISM itself is organic and fundamental in the structure and function of all society and therefore, it is organic in any enduring planning for the further development of our contemporary society whether in America or in the world order. Regionalism is particularly organic and fundamental in the structure and function of our American civilization. It is not only in the great physical expanse of a diversified continent, but in the cultural and historical backgrounds and in the essential tenets of representative democracy that regionalism is organic.

Therefore, regional research and planning councils themselves must be of, for, and by the people in an organic and fundamental structure of American public administration, and not merely tools of convenience or technical procedure changing with every wind that blows or with the wishes of every new theorizing of the intelligentsia or the dreaming idealist.

This means that in order to have fundamental regional research and planning councils of this sort they must be an essential, organic, and structural part of a *permanent national research and planning council*, which will be a sort of fourth balance wheel of government, constantly in touch with the people, with the regions, and the States, and constantly interplaying between and among the other great branches of government. This means, further, that in the American plan of the Federation of States the state research and planning council itself must be organic and fundamental and inherent in the national research and planning council. The state unit must be essentially inseparable from the regional and national even as any other organic phase of national government, and that the new arrangement is to be found in the implementation of the regional groupings.

All this means, again, that the American system of planning cannot function with the omission of any one of these councils; even as the national research and planning council is the over-all American guarantee of integration and effectiveness, so the state units, themselves constantly a part of the Federal planning, are the basic units from which in turn the regional planning councils will implement the newer ideals of American unity through a more wholesome diversity. These three together are the essence of democracy and federation of states and people in the new balance of men and resources.

It must be clear that the constitution, purpose, and function of all these research and planning councils will be such as to provide an enduring research and planning capable not only of advising the President and the Congress as to the state of the Nation at any given time, but also capable of emergency and defense research and planning, and especially of comprehending such total phases of the national program as would be ready to function in the reconstruction of the post-war period.

We have called this national research and planning council an approach and tool to dynamic American regionalism. We must, therefore, recall again the fact that the essential heart of anything that may be new in our approach is found not in the state or in the Federal, but in the regional arrangement, which makes necessary a realistic concept of the region. Basic to this understanding of the region are certain assumptions which, in the light of recent research and planning, seem self-evident.

The very definition of the region implies that it is a component and constituent unit itself, inseparable from the whole. The region is both a structural and functional unit and organic and inseparable from the total. This is in contradistinction to the common assumption of the isolation, self-sufficiency, and separatism of the old sectionalism or provincialism. It is of the utmost importance that this concept be understood, both because of the organic nature of the region and because such a concept automatically eliminates the primary basis of conflict between one area and another area and assumes national integration and unity and interregional optimum arrangements.

As relates to the universally desired redistribution of wealth and opportunity, regionalism, contrary to doctrinaire philosophies, provides the only way for such an enduring and effective redistribution by creating in each region the capacity to produce and use wisely wealth which comes from the wise development and utilization of resources and men within the framework of the region and the equipment of the people.

The enrichment of each region, in addition to the development and use of its resources, training of its people, and the balance of its industry, contributes powerfully to the wealth of the Nation, which wealth, in turn, from Federal sources may be used in coöperative and equalizing funds for leadership, research, training, and planning for the essential democratic processes of state and regional representation.

The way to train youth and to guarantee security and reality for the American army of the new generation, to raise standards of living, to insure equal opportunity and security is to develop regional capacities and programs and to work out interregional optima rather than draining some regions for others or concentrating abnormal surpluses of industry and wealth in certain regions and setting up pathological migration and abnormal situations subversive to the development of a great unified Nation.

So, too, the way of defense is essentially in the uniform strength of all regions to provide their part in the nation's total and in particular to guarantee the national reserve essential for permanent defense and permanent citizenship.

The way to effect a wholesome decentralization of wealth, of power, of people can be only through the regional balance of men and resources with always the national integration and unity of a strong people.

If there is any way to prevent totalitarianism and over-centralization, it is to provide safeguards and guarantees in the representation of a sound regionalism bottomed in the American principle of geographic representation and balance of power of the people; and if there is any way to prevent the rule of persons rather than the rule of laws and constitutions it is through this continuing equilibration between the regions, the States, and the Nation, and in the balanced procedures and economy in a constantly changing and reshaping nation of resources, men, and technology.

We may now indicate in some detail the specifications and framework of a national research and planning council which will serve as a sort of fourth balance wheel of government, as a constitutional procedure for equilibrium in American democracy, in which the constitution, the personnel, and the function of the national, regional and state councils tend to conform to the same general specifications.

The constitution of the national research and planning council would provide that it be authorized by Congress, with due referendum to the people, as a regular American constitutional form of procedure. Appropriations would be made by Congress, including coöperative arrangements with state and regional councils on the general precedents of Federal services to agriculture, highways, and public health. It would be a major administrative and functional procedure, without coercive power, but implying the prestige and distinguished service analogous to the Supreme Court. It would be adequate for research, planning, emergency defense or normal democracy.

The personnel suggested for the national council would consist of nine members, full time, whose qualifications and distinguished services should correspond to those of the members of the Supreme Court, heads of major commissions or members of the Cabinet. In general, one member of the council would be from each of the regions and one or more at large. There would be a central office with a staff of research and engineering experts. A fundamental principle is regional representation, with, in general, one member from each region finally designated.

The function of the national council, in general, would be threefold. First, to insure a continuous scientific inventory of the state of the Nation and to provide essential information for the President, the Congress, the Supreme Court, and special needs; to coördinate research and approximate a clearing house; reduce overlapping and economize

on congressional committee investigations. Second, to act as buffer between the President and the other branches of government and to provide a safeguard against over-centralization and power through government by persons to serve in emergency situations. Third, to act as buffer and democractic interpreter between the national government and the States and regions, and the necessary Federal centralization.

The constitution of the state research and planning council would provide that it be authorized by the state legislature, with due referendum to the people, as a regular American constitutional form of procedure. Appropriations would be from the state legislature, including cooperative arrangements with city and county planning groups, on the general precedents of state equalization services to agriculture, highways, and public health. It would be a major administrative and functional procedure without coercive power, but implying the distinction and service of its members comparable to department heads, state supreme court, and commissions.

The personnel suggested for the state research and planning council would consist of nine members selected as the optimum size. It would be large enough to insure a working quorum and adequate representation of the State, and small enough to guard against a promiscuous council. Not more than four would be heads of state departments. Members would not be paid. There would be a small staff of research experts and planning technicians.

The function of the state council would be threefold. First, to provide essential information for the governor and different divisions of state government; to coördinate research and approximate a clearing house; reduce overlapping and economize on state legislative committee investigations. Second, to act as buffer between the governor and house of representatives and other branches of government and to provide a safeguard against over-centralization and power through government by persons. Third, to act as buffer between the governor, counties, cities, and local government.

The constitution of the regional research and planning council would provide that it be authorized by the national legislation creating the national research and planning council, the state and regional boards being an organic part of the national council. The regional councils, however, would be representative of the region rather than the Federal authority, since their membership would be primarily composed of members of the state planning councils. It would be mutually authorized also by legislation creating state research and planning councils.

The personnel suggested for the regional council would consist of one ex-officio member from each state research and planning council, one ex-officio member from each regional planning or interstate compact group now functioning, such as Tennessee Valley Authority, one or more members ex-officio from the national research and planning council, and

one member at large. In the Southeast, for instance, this would mean eleven ex-officio members; one from TVA, one at large, and one from the national council, making a total of fourteen. In addition to fair representation, such an arrangement would insure a good chance for adequate quorum on emergency call. There would be a central office with only an executive officer and secretarial assistance.

The function of the regional board, in general, would be threefold. First, a clearing house of conferences and procedures rather than research, enabling the States within the region to keep mutually informed and to avoid conflicting procedures. Second, to act as a buffer between the States, on the one hand, minimizing the trends toward extreme state rights and interstate barriers, but, on the other, also advising and protecting individual States in fundamental matters. Third, to act as buffer between the Federal, centralized government and the individual States; to avoid conflict between States and Federal authorities and to create wholesome understanding and relationships between the States and Federal government.

Some Economic and Social Aspects of Regional Development

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EDITOR'S NOTE.—It has been necessary to condense Mr. Galloway's excellent 36-page paper into the merest outline. Readers who wish to pursue the subject further are referred to Mr. Galloway's challenging book, "Planning for America," 725 pp., Henry Holt & Co., 1941.

Introduction.—Regional development in the United States wears many aspects. Its multiple features may be classified as physical, functional, economic, social, political, psychological, and administrative. All these factors enter in complicated ways into the design of the regional fabric. There are the concrete physical factors of land, water, minerals, dams, highways, and the like. There are the functional factors involved in the use made of these physical resources. There are such economic aspects of regional development as capital investment, industry, commerce, and employment. The social aspects include such matters as the housing and health, education and recreation, security and welfare of the inhabitants. The political and psychological factors have to do with the climate of opinion and mental attitudes toward regional planning, while the administrative aspects are concerned with the governmental machinery and techniques of regional development. This paper is confined for the most part to a consideration of some of the economic and social aspects of the subject. It deals with the development of large geographic regions rather than with the planning of metropolitan areas.

There are certain functions that any economic and social system has to perform, whether it be a planned economy, an unplanned economy, or a mixed system like our own. It has to balance savings and new capital formation—the function of investment. It has to determine what goods shall be produced and in what quantities—the function of production. It has to distribute workers to places and occupations—the function of employment. It has to divide the national income among the people of the country—the function of income distribution. It has to adjust its international commercial and financial relations—the function of foreign trade. It has to supply the "right amount of money" —the task of monetary policy. It has to enable non-producers to consume (the young and old, the sick and unemployed), in order to preserve domestic tranquility and satisfy the social conscience—the problem of social security. It has to render social services to its members such as police and fire protection, education and recreation, housing and health—the realm of social planning. And, finally, it has to guard itself against foreign dangers—the elementary function of defense.

It is evident to the thoughtful observer that for some time we have been performing these functions with an increasing degree of conscious forethought and deliberation, which is the essence of planning. Depression, unemployment and war have compelled us to try to plan these matters more intelligently. The visible hand of the State has been intervening more and more in these fields that traditionally were left to the ballot of the marketplace. And now the exigencies of the national defense program are accelerating this trend, with the prospect that, when the emergency passes, there will be no such return to normalcy as occurred after the first World War.

At the outset it seems clear, in the nature of things, that the problem of adjusting international economic relations and the problem of managing monetary and fiscal policy are beyond the realm of regional competence. They must be planned on a national basis because they are national or international in scope. But it would appear as if the region—defined as a large area having geographical unity, inhabited by a homogeneous people with a common heritage and a feeling of unity, and enjoying a degree of economic and social self-sufficiency—might well participate more or less in the management of the other functions mentioned above, *i.e.*, the functions of investment, production, employment, income distribution, social security and service, and defense.

Capital Development.—In the field of new capital development, where public investment is playing an increasing part, planning requires an agency to channel the flow of savings into public works and social services and to determine their distribution between different States and regions as well as between different types of projects. In allocating the available supply of public capital, whether derived from savings or taxation or public credit, among these different public uses,

a national investment board will need the advice and assistance of local, state and regional planning agencies in developing the shelf of public works projects, determining their most advantageous geographical distribution, and deciding upon their order of importance or usefulness from the standpoint of such factors as comparative costs, employment created, and social benefits conferred. In this investment aspect of regional development the National Resources Planning Board is now functioning within limits as a national planning authority, while TVA and the Bonneville Power Administration provide examples of regional planning and operating agencies in the field of capital development.

Production Planning.—In the field of production planning, where we had some experience in the first World War and more recently under the NRA, and which is now in a transition stage under the controls being developed by the OPM, regional planning can play an important part. In any comprehensive program of industrial expansion, it will be necessary to dovetail the production plans of particular industries for each major industrial region with respect to available workers, factories, materials, vacant housing, and so forth with a view to achieving regional balance. For this purpose regional committees representing industry, labor, consumers, and local government in the region would be formed for each major industrial region. Local, state, and regional planning agencies might play a helpful part in appraising and adjusting the regional production and employment programs to ensure that they made full use of the available resources of the region and that they fitted together effectively.

Employment Planning.—In the field of employment planning we find a host of local, state, regional, and Federal agencies carrying on particular programs designed to develop economic opportunities in the several regions of the country, but these are not coördinated in any single organization or place; each pursues its partial plans separately from the others; with the result that no person or agency is acquainted with the plans and programs of all and there is no over-all regional planning or coördination of employment programs. To remedy this lack of administrative coördination in regional planning, Prof. Charles McKinley has recommended expanding membership on the Pacific Northwest Regional Planning Commission to include representatives from Federal agencies concerned with various aspects of regional conservation and development. Some such arrangement seems essential to the achievement of successful coördination of regional planning policies and programs.

Income Distribution.—Another aspect of regional planning and development is the distribution of income. In planning income and expenditure there are six guiding principles: (1) Ascertain how income is now distributed, or how it has been distributed at various periods in the past; (2) Ascertain how families at each income level spend their

income, and hence what the total demands for various goods and services are at given levels of income; (3) Estimate the changes in the total amount of distribution of income; (4) Estimate the changes in the demand for various goods and services which would result from the calculated changes in the amount or distribution of income; (5) Construct a budget of estimated consumption requirements under the projected new situation or situations, in contrast with the old; (6) Use these results as a basis for choosing between alternative social programs, or of adjusting future production to estimated requirements. These are the techniques that would be used in a planned society. There are several ways in which, even in our existing system, we can and do modify income distribution and consumption: (1) By social services supplied at all levels of government either freely or for a nominal fee out of general taxes; (2) By relief expenditures; (3) By expenditures for public works; (4) By taxation which is a potent tool for correcting economic unbalance; (5) By the various farm programs; (6) By the social security program; (7) By the various labor and price programs.

National Defense.—The national defense program has affected and will continue to affect every aspect of the economy and society of American regions. It has brought great new capital investments, both public and private, in plant and equipment to every section. The internal economic balance of the several regions has been and is being modified. Non-agricultural employment has steadily increased and new economic opportunities have opened up. Huge expenditures for armaments and methods of financing the defense program have affected costs and levels of living in every region. Public employment, relief, and social security programs in every State reflect the influence of defense activity in the changes of the number of persons employed, the number of recipients of public relief and benefits, and the amount of earnings and payments.

Advantages of Regional Planning.—Proposals to create new administrative agencies at the regional level are based on the belief that many of the problems demanding government action overlap state boundaries, but do not call for national treatment. Several developments in recent years have focused attention on regional problems and the idea of regional government: (1) The creation of the TVA; (2) The negotiation of interstate compacts dealing with watersheds, oil conservation, labor standards, and crime prevention; (3) The rise of interstate metropolitan planning in New York, Philadelphia, Washington, St. Louis and elsewhere; (4) The development of the interstate coöperation movement through the Council of State Governments; (5) The emergence and activities of regional planning commissions in New England, the Pacific Northwest, and the Ohio Valley; (6) The establishment of more than 100 types of Federal regional areas dealing with field administration and departmental planning; (7) The pioneer report of NRPB in 1935 on *Regional Factors in National Planning and De-*

velopment; (8) The pressure of economic distress and unbalance in various agricultural and industrial areas of the United States; (9) The opportunity now presented by the national defense program of alleviating this distress by effecting a greater decentralization of industry, advocated by farm leaders for many years.

The region offers distinct advantages as an intermediate area for planning and development. By decentralizing and diversifying industry, regional economic planning can avoid the social evils of specialization so evident in one-crop and one-industry communities. But action as well as planning agencies are needed. To quote Earle S. Draper:

> The region is the meeting place for local thinking coming up from the grass roots and national planning coming down from the Federal Government. Regional planning can integrate local thinking and national policies in preparation for effective regional action. Thinkers and planners can devise plans, those affected can determine policies, administrators can carry out the plans. Regional planning and regional action have a very definite place in a national pattern. They can facilitate the development of local diversities within the framework of national unity. They can stimulate democratic participation in public affairs by the citizens of the region. They can help to equalize economic and social opportunities between the various regions of the country. They can reconcile national programs with community needs, and retard the trend toward centralization and standardization on a national scale.

The Tennessee Valley Authority

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THE Tennessee Valley Authority is frequently accused of doing no comprehensive, broad-scale regional planning because it publishes few or no proposed planning and data reports. I come before you empty-handed. I can show you no splendidly illustrated planning reports replete with tables and charts and perspective sketches, no noble diagrams. I can only tell you of a controlled river system which you will have to come to the Tennessee Valley to see—water impounded behind eight enormous multi-purpose dams, with four more dams under construction; barges bringing automobiles from Evansville, Indiana, to Guntersville, Alabama, for distribution to the Southeast; barges filled with oil and grain and other products; low-cost electric power flowing to thousands of urban and rural homes in the region and producing aluminum and ammonium nitrate and other materials for national defense; diversified farming with cover crops replacing the heart-breaking single cash-crop system of farming (a change made possible by highly concentrated phosphatic fertilizer); state parks for whites and Negroes on reservoirs whose margins are held for the people in public ownership; county parks, city parks; thousands of people fishing, swimming, and boating; urban and rural communities whose physical structure, economic base, and governmental machinery are being reshaped to meet new problems and new opportunities. These

are the planning reports of the Tennessee Valley Authority. We believe that in the long run deeds will speak louder than words and that the policy of the Authority in writing its regional planning reports in concrete and steel, in improved soils, in controlled waters, and in improved local governmental agencies will eventually be justified.

The Union of Planning and Administration. I was once taught that when planning and administration are merged in one organization, planning is neglected. Perhaps this is sometimes true, but I do not believe that it is necessarily so. It is certainly not characteristic of the Tennessee Valley Authority. On the contrary, administrative action has produced many special occasions for purposeful and effective planning leading to accomplishments. The flooding of a portion of a city located on a reservoir, with the consequent necessity of readjusting water-front streets, homes, and utility lines, has provided an occasion and the impetus for a comprehensive city-planning program. The creation of a reservoir with its essential bordering protective strip in public ownership has afforded an opportunity for planning and developing demonstration state parks at Norris and Big Ridge in Tennessee, which led to the creation of the Tennessee Department of Conservation and the initiation of a splendid state-park system for Tennessee. Whatever may be the shortcomings of the union of planning and administration, it has had one cardinal advantage in the Tennessee Valley Authority—it has resulted in accomplishments.

The Tennessee Valley Authority does not have one planning department. It has nineteen of them, each developing long-term planning programs in its subject field. This could lead to action similar to that of the general who is reported to have mounted his horse and galloped off in all directions, if it were not accompanied by arrangements for coördinating the programs of these departments and directing them to the achievement of the goals and objectives established by the act creating the Tennessee Valley Authority.

The coördination of departmental programs is largely accomplished voluntarily by the departments themselves, in a favorable climate provided by management. It is true that in the background there hangs the big stick of management disapproval and budget-office refusal of funds for uncoördinated projects. Much of the coördination is accomplished informally through interdepartmental or management conferences. The procedures for some of the more complicated and constantly recurring coördinations are established by administrative codes. Administrative Code 6–0, providing for the development of land-use plans for reservoir properties, is an example. This code provides for the coördination of land-use recommendations of individual departments by an interdepartmental committee whose chairman is the Director of the Department of Regional Studies.

The preparation of coördinated plans in this manner has, in our

opinion, many advantages over the preparation of planning programs by a so-called planning department. Subject-matter planning is done by departments with special skills. Each department that will carry out a phase of a planned program is familiar with the project from its very inception and is an advocate of it because it participated in the development of the program. Sympathetic understanding of each other's objectives and programs and their place in the complete picture is developed during the coördinating process.

The union of planning and administration has a very beneficial sobering effect on the planners which may be illustrated with an experience from our own department. There was a time when our department prep.red plans, like many a other planning agency, with little assurance that they would be taken seriously. On one occasion our department had prepared but had not yet submitted recommendations for the placing of a reservoir taking line. On a memorable morning the Manager's Office informed us that it had arranged for the acquisition of lands recommended by us and approved by the Code Committee. This information caused a near panic in our department, for the knowledge that our plans would be carried out presented a situation with which we, as planners, were not qualified, by either training or experience, to deal. The land acquisition plan we had prepared was a noble conception. Believe me, it was no little plan, but neither was it a thoroughly studied, weighed, balanced, and responsible recommendation for administrative action. Our department painstakingly restudied the problem and presented a series of recommendations for administrative action for which we were willing to accept responsibility. I wonder how many of the recommendations made by planning commissions in the last decade would likewise have been reconsidered if the commission had known that they were being held responsible and that what they recommended would be carried out. I think that the low regard in which planners are occasionally held by administrators may be due in no small measure to irresponsible planning agencies and irresponsible planning recommendations.

Planning the Hard Way. The easy way of planning is to set up a staff of technicians, prepare plans more or less in vacuo, publish them, and forget them. TVA has tried this method. Now it does most of its regional planning the hard way—in coöperation with the established state and local institutions and agencies of the region that comprise the effectuating groups. Furthermore, it seldom publishes planning reports except as records of accomplishment.

It is slow, hard work to secure the creation of local planning agencies, to stimulate and counsel them, and to help them to do their own planning. But in the long run the development of local planning participants through this method of education and training will multiply many times the resources of the TVA. It will avoid stereotyped

planning solutions which fail to recognize different local needs and desires.

Conclusion. A decentralized regional agency which lives with the people for whom it is working, which has power to make not only inconsequential but also major decisions in the field, which deals not with one type of problem but with all the problems of the region, and which in a majority of these fields combines planning with administration provides, in my opinion, a most favorable environment for real, consequential, regional planning.

The Columbia Power Authority

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THE Bonneville Power Administration, or the Columbia Power Authority as it is coming to be known, is often compared with the TVA, on the assumption that it will exercise much the same functions in the Pacific Northwest as are granted to the TVA in the Tennessee valley. But the TVA is a development authority having numerous and varied powers in the fields of land-use and land rehabilitation, as well as in the generation and sale of electric energy, whereas the Columbia Power Authority has been set up primarily for the much simpler task of transmitting and selling at wholesale the huge blocks of power to be generated in the Columbia River Basin, first at Bonneville, later at Grand Coulee and, still later, it is expected, at yet other power projects to be built or acquired on the Columbia and its tributaries. Up to this time at least, the Columbia Power Authority has built no dams, nor does it have control of them or of their power stations. These will continue to be operated by the Federal agencies that built them, Bonneville by the Corps of Army Engineers and Grand Coulee by the Bureau of Reclamation.

The reasons for this much more limited scope of the Columbia Power Authority are inherent in the differences between the two regions. The Tennessee Valley began to be settled long before the United States came into being, and for many decades its lands have been almost wholly in private ownership. Further, these many years of use had done much to diminish its store of natural resources. In consequence of this depletion, the living standards of a large portion of the population of that region had been so reduced that the task of regional rehabilitation of land and of living conditions, far beyond the strength of the region, had to be undertaken by the Nation.

But the Pacific Northwest is the latest of all the 48 States to be settled. Its storehouse of natural resources is still well stocked although being diminished. Over 40 percent of its area is still owned by Nation and State. Because this newly settled region, only in part sub-

jected to private ownership, has provided such a large opportunity for various Federal agencies to conserve and develop these publicly owned lands and the extensive water resources of the region, such Federal agencies as the Bureau of Reclamation, the U. S. Forest Service, the Corps of Army Engineers and the National Park Service are notably active in the Pacific Northwest. Its people have become accustomed to the administration of large activities in the region by these Federal agencies. Hence, from the first, the people of the Pacific Northwest have desired to avoid the establishment in their region of such an agency as the TVA, believing that so comprehensive, far-flung a complex of activities as those of the TVA would disastrously weaken the helpful services of these older, well-established Federal agencies which already have a wide knowledge of regional needs and opportunities for development, and are so helpfully engaged in working with the people of the Pacific Northwest.

The CPA, though limited to power, nevertheless may well have a task exceeding in size that of any other like regional agency; for the Pacific Northwest has over 40 percent of the undeveloped hydroelectric power resources of the Nation. Indeed, *Time* magazine, in describing Bonneville and Grand Coulee, recently declared that their capacity alone will make the CPA "the biggest dispenser of electricity in the world."

The Pacific Northwest has not been slow to develop public retail agencies to distribute this power. For many years, two of the three largest cities in Washington have owned municipal systems for power distribution, with large power generating plants of their own. By this time, some twenty-five of Washington's municipalities generate or buy at wholesale hydroelectric power for distribution to their citizens. Lately, thirty of the thirty-nine counties of this State have formed Public Utility Districts. Eight of these have acquired distribution systems and are in full operation, while the rest are actively preparing to do likewise. In nearly all cases these PUD's are coterminous with county boundaries, save that they exclude those municipalities already engaged in power distribution. In addition to these, Washington has a liberal complement of Rural Electrification Administration projects, several of which are of considerable size.

While public power in Oregon and Idaho has not made as yet the same progress as in Washington, nevertheless in these States also retail distribution of power by local agencies is well established and is making substantial headway. To the impartial observer it would seem clear that at no distant date electric power will be generated, transmitted and sold to the ultimate consumer by publicly owned agencies throughout this region, almost without exception.

The construction of Bonneville was begun in the summer of 1933 and of Grand Coulee early in 1934. Bonneville had its first generator in

July of 1938, but it was not in position to deliver power in quantity until it completed its transmission lines to its nearest city of size, Portland, Oregon, in December, 1939. Apart, however, from sales of power to the power companies of the Pacific Northwest, several of whom found themselves unable to meet the rapidly increasing demand for electric energy, Bonneville's first large customer was the Aluminum Company of America at Vancouver, Washington, on August 31, 1940. Grand Coulee is just being completed and although two small generators were installed and ready for use on March 24, 1941, its first generator of any size was installed in August, 1941. Bonneville is already short of power for its rapidly increasing demand, and the two huge plants will be developed to capacity with installation of the successive generators at a rapid rate.

When fully equipped Bonneville will have a maximum capacity of its ten generators of 518,000 kilowatts and Grand Coulee, nearly four times as large, will be equipped with eighteen generators having a maximum capacity of 1,944,000 kilowatts.

In August, 1937, Congress passed an act authorizing the appointment by the Secretary of the Interior of a "Bonneville Administrator." The Act provided:

> The form of administration herein established for the Bonneville project is intended to be provisional pending the establishment of a permanent administration for Bonneville and other projects in the Columbia River Basin.

Last fall legislation intended to establish this permanent administration was introduced into Congress, where it is now pending. Since this legislation was prepared and introduced at the instance of the Interior Department, several improved drafts have been made, and it is understood that the latest draft is in all probability in its final form. Since this latest draft departs but little from the much more simple outlines of the provisional legislation, in the summary that follows it will be understood that I am using this latest draft (March 29, 1941).

Briefly, then, this legislation creates a Columbia Power Authority, described as "a regional agency in the Department of the Interior." This Authority is given all the customary powers of a public corporation, including a principal place of business, the power to acquire, own and dispose of real and personal property, to borrow money evidencing it by bonds and notes, to make and use a common seal, to enter into such contracts "as it may deem necessary," to sue and be sued, and other like corporate indicia. Its powers are vested in the Administrator, and are to be exercised by him "subject to the direction and control of the Secretary of the Interior." The Administrator, Assistant Administrator, chief engineer and general counsel are each appointed by the Secretary of the Interior and hold office, not for fixed terms, but at his pleasure.

The Act further provides that:

> The Secretary of the Interior shall make such rules and regulations as he may deem

necessary or appropriate to carry out the purposes of this Act, and his determination, whenever made, that a particular activity or undertaking is authorized by it, shall be final and conclusive upon all officers of the government. (Sec. 23.)

The one function given by the Act to the President is to appoint an advisory Council of six persons living in the region, who are to meet not less than once every two months, over whose meetings the Administrator will preside. It is made the Administrator's duty to advise and consult with this Council in regard to "important matters affecting the administration of this Act." In order that members of this Council may have no illusions concerning their importance, the act limits their compensation to ten dollars per day for attendance at meetings, and traveling expenses.

The provision of the Act that is of most interest to those of us engaged in planning activities is its section 4 a. This section provides that "in order to promote a unified and balanced development of the Pacific Northwest . . . the Authority may prepare plans for the balanced development of the region" and is authorized "to make such surveys and studies and to undertake . . . such research and demonstrational projects as it seems necessary." It is further authorized to construct and operate "such laboratories and experimental and demonstrational plants as in its judgment are necessary."

These research and planning powers are very broad, and the recognition of the need and usefulness of planning that they give must be gratifying to us all. But I, for one, regret that they are granted in such exclusive terms. Other than to provide that the Authority shall "study" the programs and activities of other agencies, and "shall advise other interested Federal and state agencies concerning its plans," there is no recognition in the act that planning now exists in the Pacific Northwest, or that any agency other than the Authority could be useful in that field. With such exclusive and plenary powers, and with such vast sums at its disposal, it is certain that the Authority could readily engross the whole of the planning and research activities of the Pacific Northwest to itself, and that, due to the meager funds available to other planning agencies, they would soon wither in its shade.

The provision for the benefit of state and local taxing units, of funds lost to them by this creation of public power agencies is far more meager than in the TVA.

Apart from criticism that is brought against its tight executive control under the Secretary of the Interior, the taxation feature and the planning section, it is a pleasure to acknowledge that the Act has been drawn with great care and circumspection. It provides that the Authority may borrow, on the credit of the United States, up to $200,000,000, and may further issue other bonds within that limit, as it discharges its incurred indebtedness. With this revolving fund of credit it is authorized to acquire electric utility systems operating in the region, but is directed

to sell their distribution systems as rapidly as sales can be made, while it may retain all of the generating facilities so acquired by it. In addition, it may enlarge, extend and improve such facilities as it retains. The fair inference is, I think, that by degrees it will acquire all generating facilities now privately owned in the Pacific Northwest, and will build such other generating facilities as will be needed in the future in that region.

Although the Act ignores the existence of the National Resources Planning Board, it contains numerous provisions designed to adjust its relations with other Federal departments. Thus, its borrowing and repayment powers and duties are subject to the approval of the Secretary of the Treasury (Secs. 10–13). Its wholesale rates for power are subject to confirmation by the Federal Power Commission (Sec. 9a). Appeals lie to the Secretary of Labor to determine the prevailing rates of wages the Authority or its contractors must pay (Secs. 15, 20f). The Comptroller-General prescribes the forms, systems and procedures for its administrative appropriation and its fund accounting (Sec. 17). The Authority must also keep accounts of its electric operations in accordance with the requirements of the Federal Power Act and the regulations of the Federal Power Commission (Sec. 17a). It is also required to consult with other Federal agencies, such as the Corps of Army Engineers and the Bureau of Reclamation, in preparing its plans and recommendations concerning the scheduling of the construction of Federal power projects, in order to meet "the combined requirements of navigation, irrigation, flood control, power and other purposes." (Sec. 4b)

Furthermore, the Authority is required to present to the Bureau of the Budget annual estimates of its power revenues with estimates of its proposed expenditures. These expenditures are subject to the approval of the Bureau of the Budget, with appeal allowed to the President to review and modify (Sec. 13e). But the one feature of the Act that has excited most criticism in the Pacific Northwest is the extremely rigid and detailed control vested in the Interior Department over every feature of the administration. The CPA is essentially a regional entity and every part of the capital cost allotted to power advanced by the Federal Government must be repaid, with 2 percent interest, by the consumers of power in the region (Sec. 13–d4).

There has been much editorial criticism, in the newspapers of the region, of the remote control thus provided. The municipalities and Public Utility Districts that are already engaged in power distribution in the region have formed what is known as the "Northwest Public Power Association" and are conducting a vigorous campaign for regional autonomy of the CPA similar to that enjoyed by the TVA. This group realizes that it must furnish, from its consumer charges, all the funds with which the CPA operates and repays its debt to the United

States. This group further believes it is entitled to an Authority living in the same region, to whom it can talk face to face and with whom it may contract.

The Pacific Northwest is farther removed from the national capital than any other part of the Nation; it suffers more from the resulting difficulties in presenting its views and its needs to the national capital. Therefore, it is perhaps more irked than any other section of the country when it finds that it must conduct all of its business negotiations and requests for service with an agency whose real headquarters are in Washington, D. C. Even if this proposed Act should be passed in its present form, it is certain that this dissatisfaction and agitation for regional autonomy will not cease until much greater recognition of the regional point of view is accorded by this legislation. Our citizens are coming to realize with increasing clarity that only as Federal administrators live in the regions, come in daily contact with the people, their interests and their various developmental enterprises, can they make regional decisions that are wise and just. With no other type of decision will the people of a free America be content.

Proposed Arkansas Region

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IT IS assumed that the "Proposed Arkansas Region" is intended to mean the area referred to in The Arkansas Valley Authority Act (H.R. 1823) of 1941, now pending in Congress. This area, which receives its name from the longest stream in the region, the Arkansas, also includes other major river basins, namely, the St. Francis, White and Red, all of which empty into the Gulf of Mexico through the Lower Mississippi River.

Within the whole region embracing these several basins is a vast expanse of territory, averaging more than 300 miles in width and extending westward from the Mississippi River to the crest of the Rocky Mountains, a distance of nearly 1,000 miles. The magnitude of its approximately 288,665 square miles can perhaps be more easily conceived when it is pointed out that it includes all of the States of Arkansas and Oklahoma, together with sizeable portions of six others, Missouri, Kansas, Colorado, New Mexico, Texas and Louisiana. Roughly, the area within the proposed region would comprise about one-tenth the land area of the United States, or would be equivalent to seven times that of the TVA with its 41,000 square miles.

Viewing the whole regional area as a topographic unit or single basin, the land rises gradually westward from the Lower Mississippi River, with an elevation of about 150 feet above sea-level, to a point just short of the Continental Divide in Colorado, where it reaches an

elevation of about two miles above sea-level. Much of the area is composed of flat to rolling plains with rough outcroppings and hilly areas, the most notable of which are the Ozark and Ouachita uplifts in western Arkansas, eastern Oklahoma and southern Missouri.

The physical, social and economic conditions in the region are as different as the streams by which it is drained. Precipitation varies from fifty-two inches in the humid eastern section to eleven inches in the arid western portion, and land characteristics range from fertile alluvial soils to rocky steeps and shifting sand dunes. To the east is the rich alluvial valley of the Lower Mississippi with its fertile soil and heavy rainfall. This area is devoted primarily to agriculture and contains most of the best land and the greatest density of rural population, a sizeable portion of which is colored.

Rising from the low land of the Lower Mississippi Valley and embracing the western part of Arkansas, southern Missouri and eastern Oklahoma, is the Ozark-Ouachita Mountain region, which, as previously stated, is predominantly submarginal for agricultural uses and therefore relatively sparsely settled. Southern Arkansas, northern Louisiana and part of eastern Texas are in what is known as the Piney Woods region which is largely in pine timber and, except for the river valleys, is generally unsuited to agriculture. Population there is also somewhat sparse.

The central portion of the proposed basin, embracing all of central Oklahoma, northern Texas and southern Kansas, is part of a large farming area and under proper management is suited, with some exceptions, to continued and permanent use for varied agricultural purposes. Moreover it includes most of the large urban centers within the basin. Generally speaking, the western third of the basin is arid or semi-arid, except in the mountainous areas, and rainfall is inadequate in most years, for agriculture without supplemental irrigation.

The mineral resources, though largely undeveloped, are rich and varied. These include a large portion of the country's oil, gas, coal, lead and zinc; all the world's supply of helium and about 95 percent of our bauxite (or aluminum) ore. Others in commercial quantity include manganese, mercury, phosphate and the like. From this area comes annually a large percentage of the Nation's forest products; its fertile soils have produced much of our wheat, corn, cotton, rice, sugar, fruits and many other products. The raising of cattle, hogs, sheep and poultry has likewise been a major activity.

Despite all of these facts, however, this section of the Nation, with its more than eight million people and great potentialities, has not enjoyed its fair share of progress. This perhaps can be attributed to numerous causes, but paramount among these has been its failure to develop and utilize to its own advantage the abundant resources with which it is blessed. With the exception of oil and gas production, agri-

culture has been the dominant activity and it is clearly evident that its economy has suffered from a lack of better balance. As an illustration, the census figures show that the per capita income of Arkansas is only $244, or less than half the $536 per capita average for the Nation as a whole, and similar conditions to this prevail in various other parts of the region.

In the belief that there is greater need for more overall long-range planning and more unified development and control of water resources in the basins, the proposed Arkansas Valley Authority Act was introduced in Congress in January of this year. The stated purpose and objectives of the bill are set forth in the first section, which reads:

> The drainage basins of the Arkansas, Saint Francis, Red, and White Rivers contain natural resources capable of providing products useful for the general welfare during times of peace and for the national defense during times of war or emergency. It is the purpose and policy of this Act to provide for the fuller development and utilization of these resources through plans, projects, and activities for or incidental to the promotion of navigation, the control and prevention of floods, the safeguarding of navigable waters, and the reclamation of public land, in order to aid and protect commerce among the several States, strengthen the national defense, conserve the water, soil, and forest resources of the Nation, and promote the general welfare of the United States.

In the main, the bill is fashioned largely after the TVA Act. It provides for a corporation to be controlled by a Board of three directors, appointed by the President, with the approval of the Senate, with staggered terms of nine years, at salaries af $12,500 annually; the President may transfer to the Corporation control and operation of dams; the Corporation would have power to acquire and sell or lease real and personal property, to construct dams and reservoirs, to purchase, distribute and sell electric power and water, giving preference and priority to States, districts, counties and municipalities, to make studies and experiments to promote the wider and better use of electric power and water, to advise and coöperate in the adjustment of the population displaced by construction of dams, to request advice of Federal authorities, to make use of surveys and plans of the Corps of Engineers, to study and survey projects or activities of the U. S. departments and agencies within the region relating to navigation, flood control and reclamation of public lands in the interests of conservation. The Corporation is directed to consult with the States, and by the Act the consent of Congress would be given to the States to enter into agreements and compacts between and among themselves.

The Act as originally drawn and introduced, however, has apparently not been entirely acceptable to some of the States affected, as evidenced in a report of a "Conference of the Governors of Western States" called in Denver on February 7, 1941, by Governor Ralph J. Carr of Colorado. This Conference adopted a resolution stating, among other things, that "the bill to create the proposed Arkansas Valley Authority is objectionable for the following major reasons:

> It provides for exclusive Federal control within the discretion of the Authority, of

the planning, construction and operation of projects designed to provide for navigation, flood control, power development, reclamation of public lands, and other purposes. It prevents the States whose interests are involved from entering into compacts without the consent of the Authority, in contravention of the constitutional right of sovereign States to make treaties, or compacts, among themselves, subject only to the consent of the Congress.

Several other objections are also contained in the above resolution, such as, "it empowers the proposed Authority to investigate, construct and operate projects without regard to other agencies of the Federal government. These agencies could participate in such activities only if requested so to do by the Authority."

It is understood that some amendments have been proposed to the AVA Act as originally introduced, and that these are now being considered in Congress. In view of all the above, and since there are some indications that other similar Authorities will no doubt be proposed in the near future, the present seems a most propitious time for a full and constructive consideration of the whole question of the organization and operation of future Authorities from the standpoint of regional planning and national policy. Moreover, since some reasonable doubt seems to prevail as to the wisdom and practicability of placing so extensive an area under one Authority, as proposed in the AVA Act, this, too, is an element which might well warrant a more thorough analysis and careful determination.

It would seem fair to suggest, therefore, that in seeking a satisfactory and workable future policy the States' interest should be fully recognized, both in the planning and development of their areas, and the regions of which they are a part. Equally important, however, is the realization on the part of the States of the immediate need of long-range planning for the intelligent use of our natural resources and that in the field of broad regional and national planning, their areas constitute but a part of the whole: also that the best interests of all concerned can be served only through active participation and full coöperation.

With particular reference to the overall, long-range planning and development of drainage basins, it apparently is agreed quite readily that there are three successive steps involved in the process, namely, (1) comprehensive long-range planning, (2) construction, including preparation of design and working plans, and (3) operation or administration. The question, however, is how can each and all of these several phases of the work be effectively performed to the satisfaction of both state and Federal interests?

Realizing full well the dangers lurking in the offing in any attempt to advance specific suggestions in a matter so complex and controversial, the following are nevertheless offered as the speaker's personal views, with the hope they may prove of some value in seeking a satisfactory and amicable solution to the immediate question of how best

to obtain the objectives set forth in the AVA Act. Briefly, it is suggested:

(1) That since official Drainage Basin Committees have been organized, under the NRPB Water Resources Committee in all the watersheds throughout the country, comprised of the most appropriate and best qualified state and Federal representatives, and since the experience of these Basin Committees during the past six years has clearly demonstrated the value of coöperative planning, these considerations be weighed most carefully before abandoning such a promising and well received organization.

(2) That with the assistance of an adequate and competent technical and coördination staff in each of the NRPB Regional Offices, the existing official Drainage Basin Committees (with technical members only) would be eminently qualified to direct the preparation of the over-all long-range plans for all the drainage basins throughout the country. Further, in coöperation with the NRPB Water Resources Committee such plans could be prepared with a view to their ultimate integration into a comprehensive national plan, and in order to give them some measure of official status, appropriate machinery should be set up for the adoption of such comprehensive basin plans or parts thereof, perhaps by resolution of the Drainage Basin Committees, subject to approval of the NRPB Water Committee.

(3) That once the official basin plans or parts thereof are prepared and adopted, provision should be made that they be accepted as the basis for development by any existing or subsequently established Valley Authority. The latter, therefore, would in effect be a construction and operating agency, much in the same position as any other individual or agency making improvements in compliance with comprehensive regional plans. Obviously there are many phases of regional development which are not influenced any more by the basin lines than the basins themselves are influenced by state lines, and consequently these river basin plans must be fitted into the larger regional development plans.

(4) That the area to be embraced within a single Authority is another paramount question and one which apparently needs more study than it has thus far received. For example, there is some feeling that the area covered by the proposed AVA Act is much too large and this, therefore, raises the question of whether the Arkansas, St. Francis, White and Red Rivers should all be combined under one Authority, or whether they should be separated, and if so, how. It is the speaker's personal feeling that generally speaking, each major river watershed should be under a separate Authority, although it is conceivable that some exceptions to this rule may be warranted.

(5) That the organization of Valley Authorities should include a small Board of Directors comprised of well-qualified state and Federal representatives with a single competent full-time administrator to be selected by the Board. The Directors of the Board should, of course, meet regularly and perhaps should be compensated in appropriate instances for their time and traveling expenses. The manner in which the Board members are designated would admittedly require some thought in order to devise an arrangement mutually acceptable to both state and Federal interests. The Board would be vested with full power to coördinate all construction work and to operate and administer all appropriate projects in the basin which are a part of the broad unified plan and program.

(6) That the regularly constituted Federal construction agencies, such as the Departments of War, Agriculture, Interior and others, continue to make investigations, designs, plans and the like, as at present, and also carry out the construction work, all in coöperation with the Valley Authorities and in compliance with the official basin plans. No doubt, however, careful investigation and study of the existing construction agencies would reveal opportunities for greater efficiency and economy through more effective coördination, and certainly every effort should be made in that direction. In considering the possibility of many Valley Authorities being established throughout the Nation, there would appear to be decided advantages, both in economy and efficiency, in utilizing the existing well-trained, well-staffed Federal agencies as against the possibility of setting up complete separate staffs in each individual Authority.

Finally, if the above suggestions appear to be an attempt to foster the regional planning concept of the National Resources Planning

Board and to preserve the present gains achieved thereunder, let all doubt be dispelled by an emphatic admission that it is; but with the definite understanding that the NRPB will continue its oft repeated policy of "building from the ground up" in full coöperation with all interests concerned. Experience has now well demonstrated that it can be done.

Regional Planning in the Delaware River Basin

HON. ROBERT C. HENDRICKSON, State Senator, New Jersey, and Vice-Chairman, The Interstate Commission on the Delaware River Basin

THE type of regional government—of regional planning and development—that I present differs in its approach and in its emphasis from those demonstrations now active in the Tennessee Valley, in the Columbia Basin and from the proposed project in the Arkansas Valley. Incodel is one of the newer agencies to develop an experimental technique in regional planning. As such, it has operated in a modest manner largely without the benefits of precedent, wholly without the benevolence of great appropriations, and simply,—without substantial grants of legislative or administrative power and authority.

The Approach.—Planning for such conservation and wise use of the Nation's natural resources needs no defense. But the manner of planning, by whom it should be done, and how the plans may become operative, are matters still open to question. One of the simplest of these plans, from the administrative viewpoint, to effect a unified control of the land and water resources of interstate streams is to turn over the administration of water control planning to the Federal government. It is increasingly evident that the present national administration views the control of interstate streams as a federal function, to be directed by federal appointees, to be paid for by federal funds.

Another approach to unified water resources control on interstate streams is the use of coöperative interstate machinery such as the Interstate Commission on the Delaware River Basin. Organized by the Joint Legislative Commissions on Interstate Coöperation of Delaware, New Jersey, New York, and Pennsylvania and affiliated with their central agency, the Council of State Governments, the four states of the Delaware River Basin have agreed to act in unison toward a common end.

This extension of state powers has not involved the creation of a superimposed governmental structure; it has not entailed the addition of a new set of governmental officials; new governmental machinery, established by marked increases in legislation has not been necessary; no new fields of activity have been created. The impetus, the groundwork of organization, financial and legislative support, technical and

advisory services—every feature of the organization and operation of Incodel has been under the joint control of the coöperating States.

One of the major features of this experiment is to confirm the interest, the devotion, and the competence of state officials to carry forward to a successful conclusion an interstate project for the benefit of the Basin, the region, and the Nation.

Organization and Methods.—The present organization includes: (1) The Commission, comprised of one State Senator, one member of the House of Representatives, one administrative appointee of the Governor, and an official from the State Planning Board in each of the participating States; (2) Technical Advisory Committees, composed of experts in their respective fields, on Information and Research, Planning, Quality of Water, Quantity of Water; (3) A central staff of seven persons, conveniently located in Philadelphia.

The staff provides for definite continuity and correlation of planning; a most important function in dealing with long-range, forward-looking plans. It discloses opportunities for coöperative effort, and provides a planning nucleus for correlating and utilizing existing information and facilities without conflict or duplication.

The Advisory Committees are composed of members of the State Planning Boards in the area and a member of the National Resources Planning Board; The Chief Engineers of the State Departments of Health; officials representing the responsible water supply agencies of each State, representatives from educational institutions in the region, and technicians from Federal and state agencies. The planning and engineering skill and experience represented by this membership comprises an advisory service of the highest type.

Working under the general guidance of the Commission, the organization has access to the combined planning facilities and technical resources of the several States, and, in a more limited sense, to Federal agencies operating within the region. This form of organization permits sufficient elasticity to adapt itself to changing conditions.

The Emphasis.—With this organizational pattern the Commission, early in its five-year history, made one decision which, more than anything else, has served to guide its working policy and program along what we believe to be sound, effective, and economical regional planning lines.

One approach might have been to seek an appropriation of half a million dollars, recruit an extensive personnel, and embark on a comprehensive survey of the Basin for all purposes on the theory that the preparation of an all-inclusive plan is a pre-requisite to a satisfactory solution of major problems regardless of their importance and urgency. Such a spectacular survey, in time, would have indicated important conclusions, previously well established in this drainage basin, such as the paramount importance of water supply, the critical effects of water pollution, the limitations of flood control work, the lack of serious navi-

gation problems and the conflicts between water power and other uses.

But instead of such a blanket survey which would have led, perhaps, to the drafting of a comprehensive plan; which would have led, perhaps, to wide public distribution and discussion; which would have led, perhaps, to agreement and disagreement on major and minor recommendations; which would have led, perhaps, to an honorable death for both the plan and its sponsoring organization—Incodel chose to make a direct attack on obvious, important, and pressing problems of regional significance and to consider such problems in relation to multiple purpose possibilities.

As a public agency, dependent for continued existence upon public support as represented by appropriations from four state legislatures, Incodel has—by choice and by need—based the emphasis of its work-program upon facts rather than upon theory. The casting or recasting of a total plan of development for the Basin seemed less immediately useful than a direct attack on known, urgent problems of regional importance. A realistic approach to provide fundamental interestate policies, principles, controls, legislation and administrative practices on the water problems of the Delaware River Basin has been consistently sought.

Summary of Accomplishments.—Incodel believes that it has made considerable progress towards the development of regional water plans and policies. Some measure of this progress can be had by only a casual examination of some of our more recent activities. One of the outstanding achievements of Incodel is its success in bringing together, for the first time, representatives of interested state agencies as well as those of Federal agencies, in a concerted attack on interstate water problems. This undertaking has been aided by the compilation and timely publication of valuable data for the presentation of major problems of the Basin. An important result of this achievement is the progress that has been made in substituting arbitration methods for litigation in water controversies. This seems particularly significant because of the large expenditures of public funds spent by these States, in the past, for litigation, and because it exemplifies one of the primary objectives of Incodel. Another notable accomplishment is the substantial and consistent progress that is being made towards functioning as a clearing house for information, as a coördinator in fact-finding activities, and as a sponsor for coöperative action among the several States and their departments in developing policies, practices, and legislation important to each of the States in the Delaware River Basin.

The plan developed and adopted for water pollution abatement and control may well be taken as a model for similar situations elsewhere. It is comprehensive in scope and is designed to permit optimum utilization of the water resources of the Delware River Basin for all purposes. It provides standards of water quality for the main stream and for its

tributaries which have been formally adopted by the several State Departments of Health and are now embodied in statutory form. The spur provided by this action to the interested States and municipalities to cease pollution and to provide necessary collection and treatment facilities, in my opinion more than justifies the entire expense of Incodel to date.

A more recent study, under the supervision of the Incodel Advisory Committee on Quantity of Water in the Delaware River Basin, of the effect of diversions of water for domestic water supply purposes, has established important basic principles which furnish the fundamental controls within which water uses may proceed in the best interests of all concerned. We believe that this work represents the essence of long-range, regional planning.

This sampling of results indicates evidence of what can be accomplished with a small force when backed by competent organizations and sound methods.

The possibilities of this form of organization are far-reaching. Through proper organization channels, the technical skill, experience, and accumulated information of such agencies as the state health boards, water and conservation departments, and planning boards are made available. By correlating the efforts of such agencies and by bringing them to bear coöperatively on the major problems of the Basin, Incodel is endeavoring to afford a solid framework within which specific regional projects may be undertaken, as they are needed. It is endeavoring to arrive at a living regional plan, adaptable to changing conditions and needs.

Conclusion.—The possibility that the States may be doing "too little, too late"—to adapt a phrase-of-the-year—is always present. There is evidence, of both quality and quantity, that the present national administration is seeking to achieve its objective of a few years ago—a blanketing of the Nation with regional planning or conservation authorities—by a slow, albeit sure, process of steady encroachment. Certainly the attitude which the Federal government shows in its approach to these problems is the single factor which will determine the continuance of interstate coöperative efforts toward regional conservation and control of natural resources.

Incodel believes these functions are a fundamental right and responsibility of the several interested States; it believes the States can effectively, economically, and democratically exercise these functions and accomplish these objectives by means of interstate coöperation through a pooling of their interests, facilities, and efforts.

IN THE STATES

STATE PLANNING

State Land-Use Programs

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OUR State has an area of 55,000 square miles approximately. It is divided into 71 counties ranging from 233 square miles in the smallest to 1540 square miles in the largest. The population in 1940 was about 3,125,000, of which about 70 percent is located in about 30 percent of the area, in the eastern, southeastern, and southern portion. The greatest density of population is in Milwaukee County, where approximately 800,000 people are located in 240 square miles. There are counties in the north where the population density outside of incorporated places is as low as seven per square mile. The best agricultural land is in the eastern, southeastern and southern portion of the State. The poorest land is in the so-called cutover region in the northern and central portion. The quality of the land and the density of population have a very close relation and may be said to follow parallel gradations. There may be said to be three principal uses of land: (1) urban, which, in addition to land within incorporated places, should include land lying in the outskirts which will reasonably be necessary for the future growth of the city, also non-incorporated places where urban conditions exist; (2) agricultural-rural, that is, areas in which most of the land is suitable for farming, and (3) non-agricultural-rural, where most of the land is not suitable for farming.

The objective of a state land-use program is to bring about such uses as will be best for the people, in the long run. To do this it is necessary to correct present misuses, and rehabilitate the results of past devastation as far as possible. The principal present and past misuses in our State are the following: (1) The clean cutting of the forests with attendant damage from forest fires. (2) Attempts to farm land which is not fit to farm. The principal deficiency in such land has been poor soil. (3) The loss of top soil from agricultural land through sheet erosion and the cutting up of the land through gulley erosion. We have not been entirely free from the ill effects of over-platting, but the damage through this is not as great as in some other States.

The program under way for the correction of these misuses is not a state program in the sense of being an exclusive state activity, although it is state-wide. Many agencies are engaged in it. The Federal Government is represented by the Bureau of Agricultural Economics, the Farm Security Administration, the Agricultural Adjustment Administration, the Soil Conservation Service, the U. S. Forest Service, and the National Resources Planning Board. The most active state agencies are the

College of Agriculture, the Conservation Commission, and the State Planning Board. The counties are represented by various committees of the County Boards of Supervisors, Agriculture, Conservation, the County Park Commission, the Land-Use Planning Committees of the Bureau of Agricultural Economics, and the County Agent. But the actual work on the land, which produces the results that all of these agencies are interested in securing, must come from the man who works the land, "the man with the hoe" if you will, and through a voluntary coöperation arising from recognition that the principles and practices, which are being brought home to him by the various agencies mentioned, are correct and will improve his condition if put into practice.

It goes without saying that any land-use program worthy of the name must be based on a plan. Where public sentiment will approve, the plan should be worked out on paper, and implemented by zoning ordinances. Probably these plans and ordinances should be made on county bases to include everything outside of incorporated cities and villages, which should have plans and ordinances of their own. I shall say nothing about the characteristics of urban plans, except that they ought to be projected out into the environs so that as the growth of the city takes place it will be orderly and properly coördinated, both with the interior and the hinterland. This is the function of the City Plan Commissions and the City Plan Engineer. Their work will be greatly aided if there is a county plan, coördinated with the city plan, so that subdivision of the land even beyond the sphere of the city's immediate influence will still have a relation to it. In our State we have another device, a functionary operating under the title of Director of Regional Planning whose approval to all rural plats (with a few exceptions) must be had before these plats are entitled to record in the office of the register of deeds. If plats border on lakes or streams, they must also be approved by the State Board of Health.

A county plan should take into account much more than the use of land. It should include communications of all kinds, parks, airports, business districts, and other desirable elements. But there are certain regulations with respect to the use of land which may be incorporated in the zoning ordinance. In such experience as we have had in the development of county zoning ordinances and plans in our rather intensively developed agricultural counties, some of which have important industries, we find that there is usually some condition which the advocates of the county plan and zoning ordinance wish to correct. This is, indeed, the genesis of the plan. In Dane County it was a rapid, haphazard growth in the outskirts of the City of Madison, and around the adjacent lakes, which was producing conditions over which the town boards rebelled. These were the beginnings of rural slums.

In other counties where catering to visitors is one of the principal sources of income, it was a desire to preserve recreational values. In a

third county where there still remains a substantial amount of good white oak timber, it was the butchery incidental to railroad tie cutting operations, the denuding of hilltops and hillsides, the danger of fire from slash, the beginnings of erosion. And so, the county board of supervisors in these counties adopted resolutions directing their counties to draw up tentative plans and zoning ordinances in coöperation with the State Planning Board staff. Such plans and zoning ordinances are designed to correct the conditions which caused the complaints and to do such other things as might be necessary or desirable in a comprehensive zoning ordinance. There are four substantial Wisconsin counties which have adopted such ordinances and five others where they are in various stages of consideration.

But zoning, designed to govern land use, has progressed much further than this. The sparsely populated counties of the so-called cutover region, which contain much land that is poor from the agricultural standpoint, were suffering from the presence of settlers living on isolated submarginal farms, who brought with them the expense of roads, schools, and public assistance. What induced the county boards to act in these counties was not the misuse of the land but the high public expense involved in public services, principally the roads and schools that it was necessary to build and maintain on account of them. Therefore steps were taken to prevent the increase of such expenses. This was accomplished through the device of a county plan and zoning ordinance covering the use of land, very simple, even primitive as zoning ordinances go, yet effective. Forestry districts in which all-year-round residence was prohibited were set up not so much for promoting forestry as to prevent people from living in isolated locations. Between 1932 and 1938, twenty-four of the twenty-six Wisconsin counties in the so-called cut-over region adopted such ordinances and thereby withdrew from agriculture in excess of five million acres of land.

Zoning ordinances, however, are largely negative. They freeze the situation as it is by specifying what can not be done. In order to improve conditions they must be supplemented by measures that are positive.

There ought to be much more city planning. While many cities have city plans, too many of the plans are dead-letters. An extensive program of education is needed to advance city planning more rapidly, more generally than at present. Our State Planning Board staff has been working with city and village authorities on a few demonstration projects. Since 1935 when our present organization was set up, we have assisted in some six or seven places. We have tried to encourage local authorities to do their own planning, and think we have been quite successful where we have worked. But total accomplishments measured against the work there is to do are scarcely perceptible. Very few, if any, cities are willing to provide the money that it takes to do an honest-to-goodness job of city planning. In the field of rural planning,

accomplishment has been very great. This may be measured in part by deeds, but to a much greater extent by the desire that has been created on the part of people for sound land-use programs.

With regard to improved farming practices, the College of Agriculture, the County Land-Use Planning Committees of the Bureau of Agricultural Economics, the Agricultural Adjustment Administration, the Farm Security Administration, and the Soil Conservation Service must be given the credit. Beginning with the Coon Valley erosion control demonstration project, where the principles of soil conservation were demonstrated in an area of 92,000 acres located in three counties, the idea of erosion control has spread all over the hilly western portion of the State, where soil erosion has been most rampant, and is extending eastward into the less hilly districts where erosion damage is proceeding none the less surely, though more slowly. The great forward step was through a state enabling act whereby soil conservation districts were set up on a county-wide basis, with the county board as the motivating agency instead of by watersheds with a special board, as originally. In this way regularly organized government, which is disposed to look with no great favor on specially organized authorities like the commissioners of conservation districts, was brought into the picture. With the change the work has become much more effective. Substantially all of the counties in the hilly western portion of our State are so organized and working at the present time.

The Farm Security Administration, through its policy of demanding sound financial farm plans as a pre-requisite to extending loans to prospective borrowers, has brought about a great improvement of agriculture, particularly on the business side of conducting a farm. Much of the sad state of present farming is due to ineptitude in business. The county land-use planning committees whose organization has been perfected through the Bureau of Agricultural Economics, with the College of Agriculture running its interference, has helped mightily to bring these programs right down to earth, and aided the two organizations previously named in the extension of their respective activities.

In the forestry-recreation type of zoning in our cut-over counties, a policy was adopted of moving isolated settlers from their remote locations to settled neighborhoods where there were roads and schools. In some places a livable habitation was bought and exchanged for the holdings of the isolated settler in order to move him away from the place where he was bound to be a continuing expense. In some cases livable habitations useful as trading stock came into the possession of the county through tax reversion. This relocation process had been aided by various Federal programs, the most effective being the purchase policy of the Soil Conservation Service, with resettlement of the evacuees through the Farm Security Administration, which last August

instituted its so-called Special Real Estate Loans policy. This is in large part due also to the activities of the Northern Lakes State Regional Committee set up by the NRPB, through direction of the President, to study conditions in the three Lake States and propose measures for rehabilitation. As regards the active practice of reforestation, of forest management, of game management, as aids to the development of the recreational resources of the region, the United States Forest Service, the State Conservation Service and the committees of the county board are coöperating cordially and effectively, on a large scale.

Land-Use Policy in the State of Arkansas

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THE State's area is approximately thirty-three million acres; its population, two million people. Nearly 80 percent of the people are living in rural sections. Most of the timbered lands have been cut over at least once, and a vast area has been seriously damaged by erosion and by uncontrolled forest fires because of a neglect of forest management by the majority of timber operators. All of this unregulated use of land resulted in tax forfeitures.

In Arkansas, when taxes on land are allowed to lapse, the lands finally revert to the state government, the reverting period being approximately five years. For many reasons the Courts of the State, until 1930, had developed a very lenient attitude toward the previous land owners with respect to tax-reverted lands. The owner could hardly lose title, and the State thus gain title, due to non-payment of taxes. The Legislature began in 1931 to enact statutes which would vest title to tax-reverted lands in the State so that the state deeds when issued to purchasers would convey a fairly safe title. None of the statutes so passed, until 1941, was successful in doing this. The State had for many years a policy of disposal of state lands by three procedures: (1) Through redemption by the former owner upon payment of all the taxes he would have paid if the lands had not become delinquent, plus penalties, (2) Through purchase of the land at $1.00 per acre, (3) By "donation" (homesteading) of the land at a fee of $10.00 plus $1.00 for the deed.

Regardless of the method followed in disposing of the land the Land Commissioner had no knowledge of the kind of land being disposed of, or the ability of the purchaser to succeed in using it. Through the years, that resulted in many families acquiring land on which they were unable to eke out a living or even to pay taxes. The land again reverted to the State. On the other hand, there were many who acquired land after it had been delinquent long enough to grow another crop of timber, and reaped large profits from the timber, or in some

cases, the mineral resources upon it. The exploitation of these resources was generally made very quickly, and the lands again allowed to revert to the State for non-payment of taxes.

In 1939, the State Legislature, following the recommendations of the State Planning Board and the Farm Tenancy Commission, passed legislation which provided the most modern procedure for administering tax-reverted lands, enacted by any State up to that time. This legislation was designated the Arkansas Land Policy Act, Section I, of which reads:

> It is declared to be the policy of the State of Arkansas to provide for the development and conservation of the human and soil resources of the State; to protect the lands owned by the State, and to provide for their classification and best use in the interests of the future general welfare and agricultural well being of the State; to encourage the settlement of the farm families of the State upon family-sized tracts under conditions conducive to successful farming; to preserve land in public ownership suited for public use as forests, parks, or other purposes; to coöperate with Federal agencies having similar and allied objectives; and to protect and promote the health, safety and general welfare of the people of Arkansas.

Under the Land Policy Act, lands are classified by the Land-Use Committee of the State Planning Board, as to whether they should be retained in public ownership, allocated for agricultural settlement through coöperation with Federal agencies, or returned to private ownership through sale or donation. The land classified as suitable for return to private ownership may be redeemed by the prior owner upon the payment of all accumulated taxes, or may be purchased by the former owner or another at its appraised value or the State may donate such lands to the head of a family who has been a citizen of the State for five years. If the lands are disposed of by donation or sale the State reserves the mineral rights, but the former owner may redeem his land rather than purchase it and receive the minerals.

There is no acreage restriction on the size of tracts that individuals may acquire except that the farm must be "family-size," taking into consideration its location, fertility, and the type of farming to be conducted. In some instances where it is found that a tract of land is too small for a farm family, effort is being made to encourage adjoining land owners to purchase this land for enlarging their own units. In no case is a family permitted to occupy land where there would result excessive costs in providing school, road, and other public services by reason of settlement in an isolated area.

The Land-Use Committee of the State Planning Board has been appointed by the Governor and consists of 16 members, 6 of whom are representatives of the United States Department of Agriculture, 8 are representatives of State Departments and two are non-governmental, or citizen members.

The State has been divided into twelve natural Land-Use areas. Procedures for classifying this land by County Land-Use Planning

Committees and County officials have been developed. These local groups have been asked to determine the minimum value of the lands in cultivation, pasture, forest, or waste land.

Under the present procedure, the qualifications of an applicant for a homestead and the suitablity of the land for this purpose are always determined. This results in the land being placed back on the tax rolls without likelihood that it will again forfeit to the State, and it further results in the family becoming a stable part of the community.

The last Legislature passed several bills affecting tax forfeited lands; (1) Appropriating sufficient money for hiring five appraisers, (2) Providing that after one year has elapsed, tax title confirmation decrees shall operate as a complete bar to any attack, (3) Authorizing the Land-Use Committee of the State Planning Board to lease or sell the subsurface of land for mineral development.

Land-Use Zoning

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RURAL zoning has made rapid advances in recent years and is being seriously considered in many parts of the country. The zoning of land outside incorporated areas is now permitted in a number of States including, among others, Wisconsin, California, Colorado, Georgia, Michigan, Minnesota, Missouri, Pennsylvania, Tennessee and Virginia. In some of these States (Georgia, for example) the enabling legislation applies only to certain counties. During the past year rural zoning enabling legislation in some form has been considered by nine States and recently South Dakota enacted a rural zoning enabling act.

Under existing enabling legislation, zoning ordinances adopted for rural areas may be grouped into three types: (1) authorizing the regulation of the use of land for agriculture, forestry, recreation and similar uses, but limited to strictly rural purposes; (2) authorizing the control of land use, location of billboards, filling stations, and small wayside commercial establishments in the interest primarily of highway safety and aesthetic value; and (3) providing for comprehensive county-wide zoning, including both the strictly rural and suburban residential and commercial zoning. The first type is represented by zoning ordinances in the cut-over counties of the Great Lakes States, the second by county zoning in California and the third by ordinances adopted in a number of counties of southern Wisconsin. This paper is confined to a discussion of the first type—that is, zoning for strictly rural purposes. Ordinances of this type have been enacted in twenty-five counties in Wisconsin, three in Minnesota, and two in Michigan.

Zoning as an exercise of the police power has been widely discussed in relation to urban situations. One of the most obvious differences

between urban and rural zoning relates to their respective basic objectives and to the type of land ownership that has been regulated. City zoning envisions all or nearly all land in private ownership, some land being used for factories, some for retail establishments, and some for residential or other uses. Zoning here is designed to prevent conflicts when these uses are intermingled, as when a grocery store invades a residential area. Rural zoning, on the other hand, has been used largely to control the occupancy of scattered tracts of privately-owned land intermixed with large areas of tax-forfeited or other publicly owned land. The broad use of these tracts has not been considered as significant as their occupancy for residential purposes, although use and occupancy are usually associated more or less intimately. Privately owned land in the forestry districts, where regulations apply, is usually not devoted to an intensive use, if indeed it is used at all. In this instance the regulations thus apply in small degree to immediate income-producing land, except that of sparsely scattered nonconforming users. Contrast this situation with urban zoning districts where private residential areas are largely in an intensive or high use.

Related to this condition is the difference in alternative uses of the land under regulation. In the city, land in a residential area, for example, can be used in most cases for residence without many additional supplementary measures. If a person has been holding land for commercial uses in a residential area, he can usually sell it advantageously as a home site even if his market for commercial buyers is removed. In other words, no other programs are needed, but in a forestry district composed largely of cut-over land where zoning is primarily useful to prevent excessive public costs resulting from scattered settlement, to protect people from settling on land unsuited to agricultural use, and to encourage forestry, a very different situation exists. If the land is to be developed for forestry, steps must be taken to encourage this use through appropriate programs. Under such circumstances, there is a place for such supplementary measures as adjustments in taxes, adequate fire protection facilities, state aids and other similar measures of making forestry profitable. Simply to designate an area as best suited for forestry without giving any consideration to means of establishing a profitable forest economy would be a short-sighted policy.

In Wisconsin, for example, the Forest Crop Law is a companion measure to rural zoning. Under this law, private lands are taxed at a low annual rate and then subject to a yield tax. In addition the State makes small annual payments to local units of government for county owned lands set aside for forestry purposes. These provisions tend to encourage private forestry and to induce counties to take tax deed to tax delinquent land and enter it under the Forest Crop Law. Thus the Forest Crop Law and zoning supplement each other in developing the use of non-agricultural land. The importance of public ownership

and management of much of the tax delinquent land in the cut-over areas of the Lake States is significant in view of the fact that over 20,000,000 acres of land in this area are already in county, state or Federal ownership, of which only about a fourth was purchased, the remainder coming into public ownership through tax reversion. As a part of a zoning program for such land, public land management programs are essential.

We are accustomed in city zoning to detailed and numerous regulations with sharp definitions of prohibited uses and with a rather numerous set of districts. In rural zoning, on the other hand, the prohibition of agriculture or year-round occupancy in a forestry or recreational district is a far broader type of regulation than the usual city restrictions on retail outlets, factories, or other urban uses. Instead of preventing conflicts between various sub-types of one broad land use—urban—we are preventing conflicts between several major types of uses—agriculture, forestry and recreation.

Actually, rural zoning has been premised largely upon controlling occupancy for residential purposes rather than use; but in considering the future application of the measure, it is likely that a more refined type of zoning classification must be considered if land uses are to be regulated satisfactorily. Minnesota has recognized this emphasis upon occupancy by designing ordinances to control settlement rather than use patterns. Here the only regulation is found in what is called a "restricted" district where year-round residence is the sole prohibition. In essence this emphasis upon occupancy control has perhaps reflected the feeling that conflicts in land use in the cut-over areas arise more from permanent habitation causing high costs for governmental services than from injuries arising from land uses as in the case of urban problems. Use of land for farming is not a detriment to forest uses in the same manner that a filling station injures property values of residential areas. Development of the land for agriculture involving the use of fire, as occurs, for instance, in the coastal area of the Pacific Northwest, approaches the same type of conflict; but the use of land for some types of farming in forest areas may not be a conflicting use, primarily because farms as such are not necessarily fire hazards and, if not too numerous, do not interfere with blocking up economic forest operating units.

City planners are more fortunate than rural planners in having an administrative organization to enforce ordinances and to prepare planning materials for consideration by city legislative bodies. In order to build a structure in a zoned city it is generally necessary to secure a building permit. Officers in charge of issuing permits can immediately check the type of building against the zoning ordinance and map and if the applicant wants to build a store in a residential district in violation of the ordinance, the permit can be refused. Certificates of occupancy

are a further check. It is interesting that some of the southern Wisconsin type of ordinances are experimenting with building permits for the rural areas. The setting aside of business or commercial districts in agricultural areas in these counties is undoubtedly one of the principle reasons for requiring building permits.

Contrast this type of situation with that of a man buying land to develop a farm in a forestry district of northern Wisconsin. He might buy the land while living far removed from the county and might not be aware of the fact that the county was zoned. Very likely, he would not encounter the zoning ordinance until he began to clear the timber and to move onto his property. Furthermore, the fact that the land was zoned might not be called to his attention until he asked for a road, or to have his children transported to school. The town board or school board would probably then inform him that he was not supposed to live in that location, and would refuse to extend to him governmental services if they were high and if the violator could be persuaded that he had no legal right to them. In case he raised no demands of this type, the next chance of contact would likely be the following assessment period when the assessor found that this farm was not one of the nonconforming users on his list. In Wisconsin, the assessor is supposed to report discontinuances of nonconforming users annually from a list supplied by the county clerk. As in actuality this procedure has not been generally followed, a violator who caused no school and road costs might continue for some time without becoming aware of his status or the officials aware of a violation. Successful administration of an ordinance means more than taking formal action against violators. It also means having substantial and informed local opinion concerning the need for and efficacy of the measure.

In the cut-over areas of the Lake States the success of agriculture rests largely upon the productivity of the soils, while in the Great Plains, tillable agriculture is insecure and unstable largely because of extreme fluctuations in annual rainfall. Furthermore, in a grazing economy, as in the Northern Great Plains, scattered settlement is often desirable because of the need of winter headquarters in places offering natural advantages for winter feed production. Even so, settlement control by zoning may be desirable in parts of the Plains to prevent scattered tracts of privately owned land from being occupied by families with limited opportunities for success, who will necessitate excessive public expenditures and create additional problems in allocating grazing leases on public lands.

In the Mississippi River Alluvial Plain thousands of acres of cut-over land are being settled and developed for agriculture. A substantial part of this land is productive for farming use if properly drained. However, one cannot readily tell from the appearance of the soil the land suitable to crop production or capable of being satisfactorily drained. After the

land has been classified for the use to which it is best suited, zoning would appear to have a place as one of the important measures for obtaining a balance between land resources adaptable for settlement and that which should remain in timber production.

In the older established areas of the United States where population is relatively dense and where a large portion of the present farm population was born and reared, rural people are inclined to shy away from zoning even though it may have a place in a land adjustment program. The land to these people is and always has been their home. It is only natural that the people residing in these areas—even though agriculture is declining because of low production and increased competition from better areas—will be less inclined to vote restrictions on land use and occupancy than the people living in areas of new settlement (or where squatters are moving in) and where the land is being settled by people from surrounding counties or States. However, in areas where forestry is replacing agriculture, the adjustment could be very much facilitated if, as a part of a forestry program, zoning restrictions were established to prevent the introduction of new malpractices and abuses once they have been abandoned. The acquisition and development of land for forestry purposes is only partially effective unless persons are prevented (as through zoning) from moving onto abandoned farms or into abandoned buildings. Rural zoning should thus be appraised in terms not simply of itself, but in the light of the opportunities it provides to complement and strengthen other measures for control of land use.

Rural Land Planning From the State Point of View

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RURAL Planning at state and local levels has been under way in Massachusetts during the past three years. At first we proceeded slowly, cautiously, and admittedly on an experimental basis with first one town committee and one county committee. Then a few other town committees and another county committee were included and variations in techniques were tried out. Although the need for flexibility in the procedure emerged as one of the virtues of the process, out of this experience there has gradually crystallized the principles which seem to be basic for success in rural planning.

With the accumulation of experience, the planning work naturally accelerated and spread until at present Rural Planning Committees (or Policy Committees, as they are termed in Massachusetts) are at work in half of the counties in the State, and on the town level, about 15 percent of the rural towns are active. In the meantime, a State Rural

Planning (or Policy) Committee has been guiding and evaluating the work of the county and town committees and determining and approving the procedures which have proven most effective.

Those who have participated in this process have been universally impressed with the "broad, logical, thorough, and realistic" aspects of the approach. They feel that the results have already been impressive enough that they have asked that plans be formulated to provide for extending this Rural Planning or Policy development work throughout all of the areas of the State on an "all out" basis during the coming year.

In Massachusetts, as in the other States, the State Rural Planning Committee authorized the Agricultural Extension Service of the State College to work with the rural leaders of the State in sponsoring and establishing Rural Planning Committees on the town and county levels. The Rural Planning work is a coöperative process by which representative rural men and women through committees, make an inventory of their resources, liabilities, tendencies, needs, and opportunities, and then make recommendations which can be used to harmonize their individual efforts and their public programs to the end that greater satisfaction may result from rural living.

As we view this process, the underlying reasons for its success are: (1) The techniques of the planning committees provide for a broad and logical approach which enables them to see the whole of their rural universe, the various parts of the whole in their proper perspective, and even the place of their own particular rural universe in relation to larger social or geographical universes; (2) It is thoroughly coöperative. It provides coöperation and the two-way flow of information between rural leaders, technicians and administrators, horizontally at each level; town, county or state. It provides for coöperation of rural leaders vertically; that is, between town, county, state, regional, or national groups. Likewise it provides for vertical coöperation between the technicians and administrators at these different levels; (3) It provides for the initiation of action and methodical and periodic checkups to determine the degree of action attained, the need for further action, if necessary, or the need for modified action; (4) It is a continuing and flexible process which recognizes the changing conditions under which we live and provides means for revising policies and plans; (5) It is sponsored by an already-existing agency (The Agricultural Extension Service) which has a complete field organization in all rural counties, it has the respect of rural people, it has the resources for gathering basic information, preparing committee reports, and carrying on other work incidental to planning activities. Furthermore, it has a personnel which appreciates its responsibilities in assisting the committees and keeping them in an active condition.

The committee makes an inventory of their resources, liabilities,

tendencies, needs, and opportunities. This is accomplished by first assembling pertinent background information regarding the natural resources, human resources, economic and social activities, and social facilities of the rural area for which the committee is responsible. This information is gathered by the technicians of the committee and placed at their disposal.

The committee then prepares an area map dividing their town or county or State, as the case may be, into areas each of which is relatively uniform with respect to the pattern of physical features, present land usage, and its needs and opportunities. These areas are then classified according to whether they are potentially suitable for commercial agriculture, forestry, game and wildlife, recreation, part-time farming, or rural residential usage. Such a map aids the committee in that it helps to break down, simplify, and systematize its discussion and work from that point on.

The committee then studies and analyzes all factors which affect, for good or ill, the success of farming and rural living in these different homogeneous areas of their universe. It is concerned with the problems of individual farms and rural homes, such as farm organization, home improvement, health, education, and credit needs. It is also concerned with general conditions affecting farmers and rural communities as a whole.

After making an analytical appraisal of resources and activities, the committee reviews the activities and programs which are already being carried on by its organizations and public agencies. It is then ready to develop its plans. These plans take the form of recommendations, suggesting changes or adjustments in present programs or practices carried on by individuals, rural organizations, or public agencies. It may suggest the adoption of entirely new activities if desirable, or it may suggest a discontinuance of certain present activities. The committee prepares for each recommendation a statement of the situation leading to the problem, a description of the problem itself, bringing out its causes, extent, seriousness, what is now being done, and by whom, and suggests recommendations for its solution.

A committee recommendation may take any one of the following forms: It may ask for further information relative to the problem; it may suggest referring the problem to rural planning committees at other levels, coöperation between various groups or public agencies, definite adjustments of present programs, the addition of new activities, or the discontinuance of old ones.

Our committee next decides how each recommendation can be carried out and by what means. These rural planning committees are not responsible for carrying out action themselves; they are only responsible for developing policies and suggesting action to the proper groups or public agencies. The committee deliberations and judgments

are crystallized into definite but preliminary reports or plans which are distributed to other local leaders and organizations and to all public agency members of the state committee. These reports become the blueprint, or common objective for all public agencies concerned.

The recommendations are arrived at through discussion in which the rural leaders contribute their judgments, based on practical experience and closehand knowledge. The technicians contribute factual information which they have at their disposal, and the administrators are able to give the committee the points of view of those who understand the difficulties and limitations in administering the already existing public programs.

This procedure provides the basis for vertical coöperation and integration of public programs, working from the local town or community level up, or from national or state levels back down to the local community. Because the administrators do participate in committee discussion and reach common opinions with other committee members, they are then in a position to whole-heartedly pass recommendations on up to state or national levels. If recommendations are passed up or down to planning committees or planning committee members on different levels, these committees or committee members have the obligation either to adopt and put the recommendation into action, or else state the reasons why they feel the recommendation is not sound or practical, and pass it back to the original committee. The original committee may feel that the reasons offered are valid and drop the recommendation, or they may carry it further by making counter proposals or offering further evidence in substantiation of their recommendation.

It should now be evident as to how this two-way flow of information will result in greater understanding on the part of local people regarding public action programs and how administrators of public programs may profit from the opinions and recommendations of local people and be better able to localize or coördinate their programs and bring about adjustments in accordance with local plans for greater effectiveness.

All problems recognized by local planning committees are classified into three groups as follows: (1) Those impossible or improbable of solution; (2) Those with solutions possible, but requiring considerable time and wide coöperation; (3) Those possible of solution in the immediate future. They are then keyed, numbered, and copied on individual recommendation blanks which provide the means for recording any plans the committees may make for follow-up. The Agricultural Extension Service assumes the responsibility for passing on these recommendations to the agencies concerned. Some recommendations are purely local in character and follow-up may be initiated by members of the local committees immediately. The Extension Service is definitely

responsible for keeping all recommendations in the "live" file until they have been satisfactorily translated into action.

This process is a continuous one. After local planning committees have developed their original or preliminary plans, they then meet regularly thereafter to determine the progress made by those responsible for carrying out their recommendations. They review the recommendation record sheets and note any progress that has been made. If progress has *not* been made, they determine the reasons why and devise new means and re-initiate action. If changing conditions warrant, they may revise or drop their old recommendations and make new ones. They revise their original reports and plans as new information and ideas come to light, in order to meet our constantly changing social and economic conditions. This process is a continuous and dynamic one which provides flexibility and moves along with the times.

We have found that it is important to have a planning committee which consists of not only lay people who are busy and fully occupied with their own individual activities, and public administrators who are necessarily fully occupied with their responsibilities, but also Extension Service technicians who have the time and definite responsibility to assist the committee and to see that their reports and recommendations do not come to rest in the files. The Agricultural Extension Service has definitely accepted a new function. The county Extension Field Agent not only carries on educational work, but he becomes the coördinator of rural affairs within his county. The recommendations for coördination do not originate with the Extension Agent, but through counsel with his town and county committees. Likewise the State Extension Service becomes the coördinating agency of rural affairs on the state level.

This whole process spells democratic procedure. It is democratic, yet it is an approach which makes for greater coördination in the effective use of our resources to the end that we may achieve greater satisfaction from rural living.

The plans for the rural areas which are being developed through this process are passed on to the State Planning Board which is, of course, the over-all planning agency for the State. The Board appreciates the rural planning work of the rural people for it gives them realistic plans which can be incorporated into their over-all plan to include water facilities, industrial transportation, and all of the other phases of social and economic activity within the State.

State Planning Boards and Defense

Massachusetts

ELISABETH M. HERLIHY, Chairman, State Planning Board, Boston, Mass.

WHAT have the planners to offer of real practical value in the present emergency? I think it is perfectly true to say that with the exception of the major urban centers, the adequately financed, professionally staffed local planning agency is the exception rather than the rule. In my own State, we have 157 local planning agencies with appropriations varying from zero to approximately $30,000. If we exclude the City of Boston and the appropriations earmarked for specific purposes, we have an average planning board budget throughout the State of scarcely more than $200 per community and it must be admitted that $200 will purchase but a limited amount of national defense. In one respect, however, the local planning agencies can make a real contribution. More than one hundred of our communities have adopted zoning plans and this means the existence of base maps which otherwise might not be available, and generally a use-of-property map as well. Some of our zoning plans have been in existence nearly twenty years, which means that the towns have been pretty well fitted into the pattern laid down for them, and business, industrial and residential districts are accordingly well established and readily classified.

In addition, more than sixty of our towns have adopted an enabling act which authorizes the planning board to exercise control over new subdivisions. It also requires the Board to make a master plan which shall show, among other things, existing and desirable proposed public ways, street grades, public places, bridges and tunnels and approaches thereto, viaducts, parks, parkways and playgrounds, pierhead and bulkhead lines, waterways, routes of railroads, busses and ferries, and the location of schools, of water conduits, and of other public utilities. All of this material, in so far as the work has progressed, will be of substantial benefit to the defense authorities.

Our local planning boards, therefore, are fully equipped so far as legislative authority and programs are concerned, leaving the contribution to be made in each case to be measured only by the man-power available.

With state planning boards, however, generally speaking, conditions are somewhat different. Although limited in point of years, many of them have had the benefit of skilled technical advice and supervision through the coöperation of the NRPB. This means that there has been a more or less steady advance along certain fundamental lines with a minimum of lost motion, and that there should be in the possession of every state planning board a vast amount of statistical information and research material, charted and tabulated and classified, and otherwise

readily made available to meet the needs of the defense authorities.

We are told that this is a war of machines rather than of men. Most of our state planning boards have made extensive studies of the industrial situation as it obtains in their own particular section. In my own State, much of the data with regard to industrial communities has been gathered by the Massachusetts Development and Industrial Commission. We have been in a position to make one particularly significant and interesting contribution to the industrial field. The Massachusetts Industrial Committee for National Defense, in coöperation with the National Association of Manufacturers, the Massachusetts Development and Industrial Commission, and the Associated Industries of Massachusetts, joined in a nation-wide inventory of plants and equipment which was the official effort backed by the National Defense Commission to locate every machine and piece of equipment available to supply the needed guns, tanks, planes and ships for the country's defense program.

Questionnaires were distributed to thousands of manufacturers in the State with a view to securing a complete listing of their machinery and equipment, their products and services, together with the number of their employees at the present time and the number that might be employed if their plants operated to capacity. Our particular function was to direct the work of assembling, tabulating, collating and publishing the returns, including indexing.

This work not only gives the most accurate and detailed picture available of the industrial possibilities in our Commonwealth, but also makes it possible to mobilize the facilities in hundreds of smaller manufacturing plants. Is this state planning? We did not stop to ask. It was a statistical job of the first importance,—tedious, complicated and complex, but one which we were equipped to direct and which we accordingly and promptly undertook. Of our four and one-quarter million population, about twenty percent are employed in manufacturing and mechanical pursuits. Thus the service we were able to render reached on an average into nearly every home in the Commonwealth.

A somewhat similar service was undertaken some months ago in coöperation with the same industrial defense group, when a survey of more than 600 manufacturing plants was completed on sources of aviation material and aircraft parts. The results of this survey, assembled and collated in the office of the State Planning Board, were circulated to all air corps procurement officials, and to the principal aircraft manufacturers throughout the United States. This survey, largely on metal working industries and machine tool equipment plants, was of supplemental assistance to the United States Ordnance District chiefs and their engineers, as well as to the Navy yards and Army arsenals.

Next to machines come men. For years our large urban centers have thought in terms of expansion. Census returns were eagerly awaited, and

as cities ascended higher and higher in the scale of total figures, they took on some sort of a preferred rating amongst their competitors. Now the tide has turned, and planners will find much to occupy themselves in the years to come in rehabilitating the areas left vacant by the receding flood of population, and in making proper provision for the recentralization which must take place, if any sort of a social and economic balance is to be achieved.

For the purposes of the present discussion, the major problem with regard to population is that of housing. The adequacy is a major concern of the Defense Housing Authority, aided and abetted by the FHA, the USHA, the HOLC and the various other Federal, state and local housing agencies. To the planner falls the responsibility for proper site location, subdivision control, and building and zoning regulations.

As for construction, I am very much afraid the time will come in many communities when white sinks and breakfast nooks and indirect lighting will offer but poor substitutes for firm foundations, weatherproof structures and adequate space, both within and without the building itself. This is particularly true in our New England climate which, while the best in the world, still has its peculiarities!

In Massachusetts our defense agency is our Committee on Public Safety working through various subcommittees, and with a local committee in each and every community. My own niche is as a member of the Housing Committee of the Planning and Technical Division. In that connection I hope to make a real contribution through our own state-wide studies, and through our daily contacts with the local planning boards and their building, zoning and subdivision regulations.

The national defense program has swung the emphasis from classical education to production. Trained hands with grimy fingers are today the badge of honor. $15,000,000 was appropriated by Congress and approved by the President for vocational education of defense workers, to be administered by the State Department of Education, to cover the cost of courses supplementary to employment in occupations essential to the national defense and for pre-employment refresher courses for workers preparing for such occupations. As a result, more than 1000 young men, drawn from the WPA, the State Unemployment Service, and the Navy Yard have been enabled to improve their earning capacities, to their own benefit and to that of the national defense, through intensive training courses, with pay, in electric welding, machine tool work and related trades.

We have in Massachusetts two military camps, Camp Edwards and Fort Devens, and one military air base at Westover Field, each in a different part of the State. With the men on duty, their families, and the normal supplementary services, each one represents a small city in itself. Then there are several distinct areas of highly accelerated industrial activity; the Fore River ship yard at Quincy, the General

Electric Company at Lynn on the east coast, at Pittsfield in the Berkshires, and Worcester half way between (which even under normal conditions had the reputation of being one of the most widely diversified industrial centers in the east, representing no less than 150 important lines as classified by the census).

The abnormal increase in activity has produced problems in traffic and transportation, housing, water, sewerage, schools and other public and private services. It is an emergency situation at the present time and perhaps can best be met by emergency methods; but in all that we do in our state planning activities we shall so far as possible, fit our immediate action into a permanent long-range program.

The land-use maps which we have prepared over the last five years will be fully useful at the present time, not only to the State Planning Board in these regional studies, but to the defense authorities in their program for civilian protection. We have a set of five maps for each town in the State on a scale of 2 inches to one mile, showing topography, roads and buildings, waterways, soil classification and existing land use and cover.

Of like value are our water resources studies which are well along toward completion. We have a score or more of major river basins in the State and these have been incorporated into a series of drainage basin studies. The technical outline followed in each case includes a general analysis of the watershed with a description of the physical, social and economic conditions, their present status, and possibilities for future development; a detailed study of the various elements of water use, flood control, low water control, power development, water supply—both municipal and industrial, pollution and waste disposal, irrigation, drainage, navigation, inland water recreation and wildlife, with, of course, special emphasis on the interrelationship of these various factors. Initiated and prosecuted as a peacetime planning project, the results are not only fully useful but extremely valuable to the defense program.

At each succeeding session of the legislature we have advocated the acqusition of a series of ocean beaches over a period of years. At the present time we have 491 miles of coast line and but one state-owned ocean beach. Each year the members of the legislature listened politely to our arguments and blithely referred our bill to the next General Court. This year, since one of the proposed beaches happens to be in the vicinity of Camp Edwards, there has been considerable agitation for its purchase, particularly for the benefit of the soldiers stationed there, and the acquisition of this particular beach has been reported favorably by the legislative committee.

There are those who feel that our every effort at the present time should be diverted and devoted to defense purposes. Surely our courage should not be less than that of the people of London who, even today,

from their underground burrows, out of the wreckage and death left by the bombs of the enemy, are looking forward to the day when the thunder of anti-aircraft guns shall fade away into silence, and there shall arise a new London, the city of the future. Groups of architects and planners are already at work, firmly united in the one broad principle that London shall be a living city and not a monument.

Recently I heard a gentleman say that he refused to subscribe to the sunset theory, and I agree with him. It is quite possible that we have troublous days ahead, but let us not go out of our way to meet them. The sun that disappears from sight today will rise resplendent in the morning. That is the law of the universe. With our faces turned toward the east, we may welcome the dawn of a new day, confident that it will bring with it, if we but prepare the way, a quality of living hitherto unknown, and industrial prosperity matched only by cultural opportunities, and both crowned by social order and peace.

State of Washington

P. HETHERTON, Executive Officer, State Planning Council, Olympia, Washington

IN WASHINGTON we urge the creation of a state defense council. An unwieldy group is named but does nothing because of lack of finances and backing. The outcome is no state defense council—no coördinating or central group through which all the numerous activities might be carried on and information channeled.

In July, 1940, Mr. Kizer and I discussed the place of state planning councils in defense activities, and as an outcome a letter was sent to the then governor suggesting the creation of a state defense organization with the State Planning Council as the research and fact-finding body. When such an agency was not organized, we undertook to see what could be done in the strictly civilian sphere; that is, leaving home guards, disaster units, selective service registration and all such military or semi-military functions to whomever cared to tackle them.

About this time two encouraging things happened: The Division of State and Local Coöperation was appointed in the National Defense Advisory Commission, and from the NRPB came the word that the President had requested the Board to consult with the members of the Defense Advisory Commission on problems of *Industrial Location*. It looked as if we were going somewhere.

The Pacific Northwest Regional Planning Commission called a meeting to review all information and sources of information which might be applicable; raw materials, types of manufacturing concerns, construction equipment, transportation equipment including terminal facilities, power, fuels, labor, housing, water supply, industrial locations. It was hoped still that a well financed central organization would be set up as coördinator and clearing house. The Council had not the authority, staff, or funds to assume this task.

Finally, observing that little was being done, the Council undertook the compilation of a report to show the resources in the State of Washington available for defense activities. Each resource was treated briefly and concisely, with suitable references given to more extended information. Copies were sent to the NRPB, to the Division of State and Local Planning and to the Office of Government Reports, asking if further copies were desired or if names could be given to whom it should be sent. Few acknowledgments—fewer names—were supplied.

I think it is well to emphasize here the viewpoint of the Council in publishing this report, "Washington's Resources for National Defense." In its letter of transmittal to the Governor it said:

> It (the Planning Council) not only believes that present gains in resource conservation should be maintained but that as far as possible present expansion in war industries and activities should be so directed that a much broader and better balanced economy for the State will result on our return to a peacetime basis.

In the foreword the report stated:

> . . . the advances that have been made in resource conservation must not and need not be scrapped. The Council is interested in seeing that health and living standards are maintained, that sub-marginal lands retired from cultivation are not again plowed up, that good forest practices already in course of adoption are not broken down, that stream pollution is held in check, and that grazing areas are not overloaded.

It also quoted from October *Fortune:*

> The serious attempt of the National Defense Commission—and particularly of Commissioner Davis (Agriculture)—to fan out the defense-inspired industrial development through the South and West is a step in the right direction, not only for immediate strategic purposes but also *in the future interest of a balanced economy.* Moving industry into the surplus labor markets of the rural regions would reverse the flow of the last war, when the farms were raided and the cities were crowded with workmen who, when depression came, had no farms to fall back on.

Sections covering labor supply and skills—and, by the way, the state office of Unemployment Compensation and Placement is an excellent source of up-to-date information—vocational education, taxation and laws affecting industry were added to the usual statements of raw material supplies. Emphasis was given to hydroelectric power, since even with all the information available misstatements had been made before congressional committees by nationally known engineers, and because the Pacific Northwest and the State of Washington are the only localities in the United States where low-cost abundant power is immediately available. Incidentally, from hydro plants under construction or partially developed, an expansion of 3,894,400 horsepower can be achieved, which, when completed, will bring the total installed capacity of the State to over 5 million horsepower, possible exceeding the total installed capacity of all types of central generating stations in the State of Pennsylvania. Some of this has already been added at Bonneville and additional generators will, within a few months, be installed at Grand Coulee, Skagit, and at Bonneville.

It should be mentioned here that as a direct result of the presence of this resource several industries, in which power is a large item in manufacturing costs, have chosen the Northwest. The Aluminum Company of America and the Reynolds Metals Company are now established in the State on the Columbia River, and other electrochemical and electrometallurgical industries have moved to the Northwest.

By September of 1940 effects of military and defense manufacturing activities in western Washington, particularly in the Puget Sound area, were beginning to show themselves. Schools were crowded, housing difficult to obtain, and highways overloaded. These conditions were common not to any one section but to all areas bordering on Puget Sound. Forts which had long been abandoned or had only a corporal's guard were remanned. Troops poured into Fort Lewis, planes and men into McChord Field; the Puget Sound Navy Yard at Bremerton upped its payroll from around 3,500 men to 10,000. It is now about 14,000 and likely to go higher. Ship and boat building expanded from practically nothing, and the Boeing Airplane Company grew like a mushroom. Demands poured into the State Capital for more school buildings, for improvement of roads, for housing.

To get the over-all view the Council took the lead in organizing a Puget Sound Regional Planning Commission whose membership is composed of officials of counties and cities, planning commissions, and port districts. It was emphasized that while the immediate job of this commission would be to consider critical problems caused by defense activities, its viewpoint should extend beyond the emergency period. As a result the activities of cities, counties, school districts, housing authorities and health agencies have been coördinated and rather complete information compiled for the use of state and Federal authorities. The NRPB has provided the services of a consultant to assist and direct communities in gathering information, and, strange as it may seem, some of his time is spent in urging them to action by stressing what they are or will be facing shortly.

What results have been obtained? The information collected has been used as a basis for state legislation and appropriations. At the session just closed bills were passed to provide financial assistance to schools for operations and capital expenditures, and to create water supply and sanitary districts financed on a rental basis. Housing authorities have been created and new county and city planning commissions established. An initial plan of combined highway and ferry transportation has been developed for the area.

Some highway bottlenecks have been relieved and housing accommodations built, but no construction has commenced on badly needed school housing, sanitary improvements, water supply, or other public facilities. The answer is that the state and local communities cannot possibly meet the financial burden, and it is questionable that they

should. The Federal Government has recognized this, although it is slow to act. In the October 25, 1940 issue of *Defense* appeared a Senate resolution calling upon the Army and Navy Departments to inform the Senate about the need of school facilities "at or near naval yards, Army and Navy reservations and bases at which programs for defense workers are being carried out or contemplated." I have to assume that some of this information has been presented at the hearings on House Resolution 3570; but here it is May and nothing yet done. It is now too late to let contracts and get schools built for fall occupancy.

Planning and zoning have been given an impetus. The Civil Aeronautics Authority, in recommending landing field construction, urged the zoning of the adjacent land to protect the field. Divisions of the National Defense Advisory Commission recommend the use of planning commissions in selecting sites for housing, recreational units and other facilities for which the Federal government may provide matching funds. In desperation county and city officials are turning to planning commissions for information and for service. When Mr. Charles Taft visited the Northwest in April he was most emphatic in stating that the Federal government, if it had anything to say about it, would not tolerate the creation of rural or city slums in the rush to meet the present emergency. Planning must be done, he said, and to carry out and enforce land-use plans, zoning ordinances, where basic laws permit, should be adopted and enforced.

At the request of the newly elected governor, the State Planning Council received, in addition to its regular budget of $44,500, the sum of $150,000 to conduct research to further the development of industry within the State. This will give us an excellent opportunity to extend our knowledge of men and resources, and to put the information to immediate application. While activities valuable in defense will receive first attention, a definite attempt is being made to encourage those industries which probably will have an expanding peacetime market.

The creation of a state defense council was authorized by the legislature just adjourned. It is to be set up in two divisions: one to take care of public safety, fire, health and so forth, and to organize disaster units; the other to handle housing, recreation, and in general to coöperate with the National Defense Advisory Commission.

But so many things yet remain to be done. There is no clearly defined channel to get information to and from national headquarters. Should this be through the NRPB, the Division of State and Local Coöperation and the Federal Security Agency, or what? It seems to me one channel and one channel only should be agreed upon. As it now stands it is all too confusing.

Little, actually nothing, has been done in the State on industrial site location. To date sites have been chosen without regard to existing labor

supplies, transportation facilities, housing, and all such necessary considerations. As a result bad conditions have been made worse. No attempt has been made to consider taking the industry to labor supply, and while Mr. Davis, of the Division of Agriculture in the National Defense Advisory Commission, recognizes this problem, certainly no efforts to solve it have been noticeable in the Northwest.

The April 1, 1941, issue of *Defense* quotes a splendid statement of policy on the location of new defense facilities adopted by the National Defense Advisory Commission and transmitted to the Office of Production Management for consideration of the recently established Plant Site Committee.

> The National Defense Advisory Commission regards the selection of locations for the new industrial facilities required by the defense program as a task of outstanding importance. On the sites which are selected depends not only the strategic security of our defense industries and much of their efficiency for defense production, but also important and permanent consequences for the economic life of different parts of the Nation.
>
> Experience gained during the past ten months would indicate that the immediate ends of national defense are largely consistent with the longer run objective of a better balanced industrial economy. To reach these objectives it has become apparent that the following principles must govern the location of new industrial facilities:
>
> 1. That sites be avoided in cities or regions where defense orders are absorbing or are likely to absorb the available labor supply, or to congest housing, transport, or other facilities.
>
> 2. That every possible preference be given to locations where large reserves of unemployed or poorly employed people are available and where industrialization during the defense period will contribute to a better long-run balance between industry and agriculture. These conditions are particularly acute in many areas of the South and West.
>
> 3. That where facilities must be located in the present industrial areas, special attention be given to regions which have suffered a decline in their peacetime industries or to cities which have not been heavily engaged in defense production.
>
> 4. That the proper location of new plants, the wider distribution of defense contracts, and an aggressive policy to promote the subcontracting of the larger defense orders held by private contractors, all be considered essential parts of a well-rounded program to obtain larger use of the human and material resources of the country in the defense effort.

If that actually can be followed we will be going somewhere.

This is the general picture I bring with me from the Pacific Coast. We have made some gains; a state defense council has been created, a regional planning commission established to consider the over-all problems of the most critical area, a report issued summarizing all essential information on resources of men and materials, a substantial appropriation obtained for further research into natural resources and industrial development, new types of basic industry established which will diversify our present rather narrow base and upon which secondary manufacturing may be built for emergency and peacetime purposes, and now growing is the realization of the need of looking beyond the present emergency to the problems which will follow the let-down. But we do not yet appear to be getting our teeth into this matter of defense. We do not yet appear to realize the terrible urgency of the situation.

To correct this, better lines of communication should be created between States and the Federal government. Such recommendations as given above about plant site locations should be put into effect—not just printed and distributed. The problem of "farming out" should really be tackled and the public should know what is being done. And of all the public organizations the state planning councils should retain the viewpoint that a state of peace will again return, and that as much as possible of our present efforts should be directed to the better and fuller use of men and materials when that day does come.

New Hampshire

FREDERICK P. CLARK, Planning Director, New Hampshire Planning and Development Commission, Concord, N. H.

What is Happening?—Just as in other States, New Hampshire is subject at present to military and defense industrial developments. Many industries are operating at capacity, and some are expanding tremendously. Our largest industrial expansion is at the Portsmouth, New Hampshire, Navy Yard, where within the space of less than a year employment has jumped from 2,500 to more than 8,000, and estimates indicate it may reach 12,000 to 16,000 workers before another year has passed. Just what the exact employment will be, no one knows. In fact, that has been one of the main difficulties of the housing situation in and near Portsmouth—private enterprise has no reliable information upon which to make even the sketchiest sort of an estimate of its chances if it builds houses for the Navy Yard workers. Some workers have been traveling as far as 100 miles to work and another 100 miles back each evening. When a check was made by our office last fall, we found that 1,500 workers were traveling to work from homes beyond a fifteen-mile radius from the Navy Yard.

Another aspect of the defense industrial situation is operating in reverse to the situation just mentioned. Skilled workers, particularly in the metal trades, are being syphoned out of the State to other defense centers. The man-power of the communities so affected is so reduced that when the industries of the locality receive defense orders they find difficulty in filling their labor needs. And, too, these places face the problem of re-attracting or replacing the skilled man-power after the defense emergency.

Still another industrial development which we are experiencing in New Hampshire is that of migration of industrial concerns from the congested industrial centers of the northeast to our smaller communities. The reason for this is not, as might be expected, the susceptibility to bombing attacks of those congested areas, but is a result of the intense competition for labor on the part of defense industries in such areas. The concerns which are moving out are non-munition industries which

cannot afford to compete with the high wage scales in force in the munition plants.

In the military phase of defense developments we are having our experiences also. Our Navy Yard is, I believe, a primary, and the most northerly, submarine base on the Atlantic seaboard. It will have a large new drydock, which may be used for repair of the smaller battle craft of the British Navy. The forts and full complement of soldiers to protect the Navy Yard are being developed rapidly. We have one of the primary air bases and a number of subsidiary military air fields. This development, of course, calls for additional housing and such facilities as practice bombing ranges.

On top of all these happenings which are associated with the national defense, we have our job of civilian organization and preparations for civilian defense in our local communities (just in case).

What Are We Doing?—What does all this mean to our state planning agencies? We start from the fact that planning is a *way* of doing things, and that the planning agency does not have any one particular field of subject matter, although the planning staff may just happen to have persons with training not found elsewhere in the state service. A state planning board is concerned with the formulation of sound plans for the development and use of the resources and opportunities of the State. Such concern is not changed during a period of national defense—it is intensified. More than ever before, we must understand our resources, opportunities and limitations, and have our plans mapped out for whatever actions may be necessary or desirable.

Our Governor has called upon our State Planning and Development Commission to act as the planning staff agency of the State Defense Council, in addition to its functioning in similar capacity to the Governor's office. He has asked us to concentrate our planning activities along two particular lines, namely, defense preparations and post-defense adjustment. This seems to be a logical assignment for the planning agency since it assures that full use will be made of the studies and plans prepared to date, and it also provides the relationship necessary if defense planning is to be keyed in with planning for the normal development of the State.

Making Facts, Plans and Studies Available.—One of the very first duties of a planning agency is to make available to defense agencies all data and plans which are pertinent in any way. As many persons at this conference have already pointed out, planning agencies should not, in fact cannot, afford to wait until asked. They must volunteer the information. This information is important and must be available in the place where it can be used, so that it may contribute to the fullest success of the defense effort and so that, wherever possible, the defense effort may not unnecessarily harm normal community and state development but fit into and further the meeting of normal requirements.

Both state and local planning boards will have to reexamine plans already made and the basic considerations underlying them, revising conclusions and plans, if necessary, in the light of rapidly changing conditions.

Assisting in Defense Preparations.—Planning boards can assist in defense preparations in several ways, all associated with regular activities:

1. Reexamination of resources (human, natural and developed) in the light of defense needs,
2. Determination of the adequacy of existing and planned services, and planning to eliminate deficiencies,
3. Coöperation in organization of civilian effort, and in planning for civilian defense and safety measures.

Reexamination of Resources.—Full information on every resource of the State should be secured and made available at the place where it can be used. In New Hampshire we made available many months ago, to the various agencies of the national defense organization, full details on our industrial resources (including vacant or only partly used factory facilities, labor, and raw materials for industry). A detailed directory, showing exactly what products were manufactured in the State and where the factories were located, was most valuable to the procurement divisions of the armed forces in securing speedy placement of orders. We have been in constant working relationship with OPM. We prepared and placed in the hands of the defense production agency an up-to-the-minute economic survey of our mineral resources. We disclosed that several of the important non-metallic minerals, formerly obtained from foreign sources now unavailable, could be secured economically in New Hampshire. Production has already been started on some deposits disclosed by the survey.

Planning for Adequate Facilities and Services.—An inspection of the adequacy of existing services, both in quantity and in location, is essential to planning for satisfactory accommodation of military or defense industrial concentrations in the State. As a consequence of the migration of population to certain communities where defense activities are concentrated, shortages in housing and related facilities have become major problems. Before building to meet this need, we must know the capacity of existing facilities if we are to avoid unnecessary duplication. In our most concentrated problem area, the vicinity of the City of Portsmouth, New Hampshire, we have stimulated local interest and improved understanding of the situation. A city zoning ordinance existed, and at our suggestion a local planning board was established. Our state planning agency makes it a policy not to interfere in local matters except on request, but has assisted the local authorities to get the facts necessary to various local actions. At the present time, the city is considering the employment of a planning technician to aid the citizen planning board to function in the interests of full economy and adequacy of facilities for defense housing.

The region about the Navy Yard being an interstate area (parts of New Hampshire and Maine), our board and the regional office of the NRPB prepared plans for the establishment of a regional defense council by the two States concerned. Through the Division of State and Local Coöperation of the Defense Advisory Commission, a meeting of representatives of the two Governors was held and an agreement for a regional council made. The Governor and Council of New Hampshire immediately ratified that action months ago, but the Governor of Maine has not yet acted.

Through the medium of our regional association in that section of the State, we are carrying on the work. We have a regional plan for the area practically completed, and we hope to receive from our Governor and Council additional funds to speed completion of this work within the next month. We trust that through the good offices of the Defense Housing Coördinator, and the Division of State and Local Coöperation, we will be able to have this plan used in decisions on further defense developments for this area.

We are studying the probable occurrence of other defense problem areas and will develop plans for meeting such situations as can be anticipated.

State Defense Council.—It is the intention of our Governor that the planning studies of the State Defense Council be conducted by the State Planning and Development Commission. Our Defense Council follows quite closely the organization recommended by the Defense Advisory Commission. One of the several technical committees of the Council is the Planning Committee which is headed by a member of our state planning commission. Through this committee the state planning agency will function, giving thought to the general planning background for the Council's work, also working in detail with the several technical committees (human resources, industry, housing, welfare, transportation, public safety, finance, etc.).

The State Defense Council has the function of supervising and directing investigations and of reporting to the Governor such legislation or other appropriate action as it may deem necessary with respect to any of the services, interests or facilities of the State. It is the plan in New Hampshire that the state planning board be the agency to make and evaluate the results of investigations for submission to the State Defense Council for its action.

Post-Defense Adjustment.—The vast dislocation of population, both in an occupational and a geographical sense, will require herculean efforts of readjustment after the defense period. Now is the time we must be thinking of the problem.

We must plan for the resumption, and in fact expansion, of private industrial production for normal needs at the earliest moment. Accompanying this effort, and second only to it, must be the preparation

of a "reservoir" of useful public works projects, which can be used to cushion the shock of the change-over to a peace economy again. All these planned public works projects should be in accordance with comprehensive plans for the particular areas concerned. But if they are to be that, now is the time when we must lay the foundation. It will not do to wait until the post-defense period, when a program is presented.

We are already planning for the post-defense period in New Hampshire. Part of this planning involves the improvement of our financial situation so as to be in a favorable position to pursue whatever program of adjustment may be necessary. A capital budget, prepared by our planning agency and the state comptroller for the Governor, has been presented by the latter and will probably be adopted. This is the first such budget in New Hampshire and is believed to be one of the first submitted by any Governor.

Another phase of our planning is the utilization of the huge resource of skilled labor brought from all over the country to the Navy Yard. When the defense employment drops, many of these workers can be induced to stay in the region if suitable work is available. With that in mind, and with the opening up of some excellent waterfront industrial land along the Piscataqua River, by reason of a new bridge allowing passage of ocean going vessels, plans are being developed for an industrial estate similar to those operated with success in England. With the decentralization of certain types of industry, the nearness of the Port of Portsmouth to South America, the scarcity of good tidewater industrial property north of Boston, and the expressed desire of some of the workers to stay in the region if permanent employment can be found, the prospects of the proposed industrial development seem better than fair. It is proposed that small skeleton or "incubator" plants, using types of worker skill found in the Navy Yard, be developed and that workers to fill these plants be absorbed as the Navy Yard lays them off. After the job of building the fleet to two-ocean size is completed, Navy Yard personnel will be reduced to a maintenance size. Industry has already expressed interest in this plan.

Promotion of Sound Development.—I believe that it is the responsibility of every planning board to see that such new development as is required by the defense emergency be in accordance with sound policies and, wherever possible, usable in the course of normal growth of the area concerned.

In areas where a concentration of workers requires additional housing, it is highly desirable that the housing be so located and designed as to become an integral part of the community after the emergency has passed. Unfortunately, in spite of all the fine statements of Federal officials to date, comparatively little attention has been paid to local suggestions, even when made in plenty of time.

It is important, also, that facilities which are built to serve new housing or to serve military needs, wherever possible be placed in such locations as will serve the regular needs of the State or community after the defense emergency.

We in New Hampshire prepared, some time ago, a state plan for development of airports and airways, showing where, in the ordinary course of state and local development, such air transportation facilities would be needed. We made this plan available to the Civil Aeronautics Authority, which incorporated it as the New Hampshire portion of its national airports plan. As a result, every one of the various military airports now being constructed in our State is located in accordance with our state plan. Through the existence of a state plan, these airports will not only serve a military purpose, but after the emergency, they will fit into the system for meeting the regular transportation needs of the State.

A similar thing is true of recreational facilities. The great influx of defense workers to the Portsmouth, New Hampshire, Navy Yard brought with it the requirement of additional recreation facilities. Fortunately, we had our state recreational development plan, which showed the desirable facilities in that section of the State. It is expected that the new facilities provided to help take care of defense workers' needs will be those needed later in the normal course of state and local recreational development.

We can do something to prepare more adequately for defense; we can be ready for the post-defense period to prevent a depression, but to do this requires planning—NOW—as never before. Planning boards have an opportunity. I believe they can meet it!

Virginia

MORTON L. WALLERSTEIN, Chairman, Region II, NRPB, Richmond, Va.

MY ONLY excuse for talking is that as an amateur planner I have had the privilege of making several spot surveys to try to ascertain through coöperation with officials and public-spirited citizens just what are the most urgent problems in the particular defense areas. Out of that, I have drawn certain conclusions which may at least furnish a basis for discussion.

It seems to me that we can draw three fundamental conclusions from a comparison of the two World Wars: *First*, our people now have a greatly increased mobility, actual and potential, through more adequate transportation; *Second*, we learned from the other war that some day the extra governmental revenues and extra business incident to the spending program suddenly terminate; and *Third*, that machinery, food, and equipment replace manpower as our prime war requisites. I shall briefly enlarge on each.

First, we have failed to realize both the quality and quantity of the increase, since the last war, in automobiles and highways—indeed in the efficiency of all forms of transportation. In every area I know, there are certain roads which—through sometimes permanent, sometimes temporary improvement, not to mention certain new connecting links—will permit those in the area to move around easily. Industries are now drawing workers from distances of sixty miles, and at the present time in one important industrial area a railroad is transporting people, by commuter trains, a distance of seventy-five miles a day each way. Generally speaking, however, we have utterly failed to recognize that we cannot consider housing, health, recreation and related problems until we at least exhaust every possibility of drawing those we need from as wide an area as is consistent, for these reasons: (A) It is important to use the local people as far as possible in the local environment, so as not to destroy the local economic pattern; (B) Money spent on these highways will as a rule be of permanent and lasting value, and (C) Through the scattering of population, the housing problem is lessened through lack of congestion, the health problem is not so acute, and greater opportunity is afforded for various types of recreation.

In the solution of this problem, both the state and local planning boards have as a rule amassed important material, not only on the roads and transportation facilities, but frequently on the various populations and economic conditions surrounding. They can certainly be well used in this connection.

Second, our local and state government units through twenty years of experience, have learned that Belshazzar's feast must cease, pleasant as it may be. They have had enough of the morning after the night before. It has become imperative, therefore, if this war is a national job, that the national government shoulder its proper part of the state and local burdens brought on by the defense impact, even though these improvements which are of a permanent nature should be paid for, in part at least, by the State and localities. Serious impairment of state and local sound financing is of course a national calamity, as is also the disarrangement of private enterprise. Only through far-sighted long range planning from the beginning can a post-war tragedy be avoided.

Third, as stated in an article in the current Harpers Magazine:

> This war is not a war of masses of men; it is a battle of engineering skill involving comparatively limited man power very completely equipped with an appalling variety of mechanized equipment. The battle line is in the factories and homes of England, and we are part of their defense. The machine operator has become a fighting man; this war will be won at the machine.

We need to stop false emphasis on patriotism. This means we must stop pirating labor, luring valuable personnel from one governmental agency to another, and calling as draftees that who occupy important niches, however menial, in assisting those waging the present war. At the

risk of serious disagreement as to the planning function, it seems to me that planning boards through publicized studies might assist in solving this difficult problem.

To summarize; it would seem clear that it is up to the national, state and local planning boards in the defense activities to insist that the mobility of transportation be recognized as basic, that the planning agency be recognized as the one agency that must set the pattern that will prevent post-war depression, and that our planning must recognize this as a technological war.

Finally, in many of the States in our section our planning boards, acting, unfortunately, in a general utility capacity, have had to step into the picture to bring into action, or even create, agencies to further the defense endeavor. Planning boards should have been, and in the future most emphatically should be, merely advisory to the various action agencies. Embarrassment has, of course, been caused by the dearth of technical planners, and by the secrecy surrounding government defense activities, particularly those of the Army and Navy. The time to call on the planners for advice is before, not after, the location of a camp or industry has been determined. Even if the chief job of planning is to provide a post-depression cushion, it cannot be done in a vacuum. There must be coördinated planning—arranging, rearranging and suggesting to action agencies—during the whole period of defense activity. Unfortunately we are facing the great danger that the impact of the war and the desire to defend our country may be dimming at this time the importance of planning, particularly on a long-range basis.

Tennessee

WILLIAM D. PRICE, Executive Director, Tennessee State Planning Commission, Nashville, Tenn.

TENNESSEE is defense-minded. It is therefore natural that the State Planning Commission should be actively interested in defense activities. Defense contracts and expenditures in Tennessee are rather small in comparison with the amounts being expended in many other States. Per capita defense expenditures in Tennessee up to March 31, 1941, were only $22 as compared with $320 in Virginia, $295 in Washington, $206 in New Hampshire, $198 in Massachusetts, and $195 in California. But Tennessee is an inland State, and has no coastlines and shipbuilding facilities.

The Tennessee State Planning Commission, however, has been drawn into the defense picture in two principal ways—our staff is serving as the staff for our defense council which at present is known as the Tennessee Advisory Committee on Preparedness, and a considerable part of our local planning work has necessarily been concentrated in areas adjacent to defense projects. Recently, we have

undertaken another defense activity in connection with forthcoming army maneuvers in Tennessee.

I do not know whether Tennessee was the first State to create a defense council, but it was certainly among the first. Governor Cooper created the Advisory Committee on Preparedness by executive order on May 21, 1940, before state councils were the vogue. Since the members of the Committee receive no compensation and have their private business interests, the Governor realized that it would be unfair to expect them to devote too much time to the work. Accordingly, he asked me, as Executive Director of the State Planning Commission, to serve as Executive Secretary of the preparedness committee and directed that our planning staff be utilized in the defense activities of the Committee.

Our work has been similar to that of most state defense councils. We have attempted to secure factual data regarding the State and its communities that would be useful to defense agencies of the national government. We have served as a liaison organization between cities, counties, chambers of commerce, and other groups and individuals and various Federal agencies. We have furnished information to various public and private agencies about the different aspects of the national defense program.

Recently, at a conference of the industrialists and business men of the State, held at Nashville to determine what facilities there were in Tennessee for producing defense materials and how they might be better utilized, it was decided that the State should keep a representative in Washington so as to maintain closer working relationships with the Federal agencies. The Chairman of the Advisory Committee on Preparedness, Major General Lytle Brown, has accordingly gone to Washington to serve in that capacity. Last week, another representative was appointed to assist him. Thus far, little has been done toward organizing local defense councils, only three having been established in Tennessee.

It has been our thought that planning in defense areas is important and in danger of being overlooked. The speed of defense activities plus the cupidity of many individuals has resulted in mushroom growths and undesirable developments in the vicinity of defense projects. Probably, Tennessee is not alone in this.

We have made every effort to assist the local governments in planning for such developments so as to avoid the worst situations and to adjust the pattern of community growth, not only for immediate needs, but also from a long-range viewpoint. This work has been hampered at times by a lack of interest on the part of many individuals in anything except immediate profits, by a lack of personnel on our part and by the inability of local governmental units to finance the technical help needed.

In Tennessee, we have six major defense areas. These are the Millington section of Shelby County where a powder plant has been built; the Milan area where an ordnance plant is under construction; Nashville where the huge new plant of Vultee Aircraft has just been completed; Tullahoma near which Camp Forrest, an army training camp, is located; Alcoa where the tremendous expansion of the Aluminum Company of America's plant is taking place; and parts of the Tennessee Valley where TVA's dam construction schedule is being stepped up.

For the Millington powder plant area we assigned a staff planner to work in coöperation with the Shelby County Planning Commission. On the basis of population and land-use studies, a major road plan was prepared and necessary revisions of the zoning regulations for the county were drafted.

In the Nashville area, the city and county planning commissions have been devoting a major portion of their time to the preparation of plans for the section around the aircraft plant. Roads, sewers, and supplementary zoning regulations have been necessary. An acute housing shortage is being met by the construction of defense housing projects under the direction of the Nashville Housing Authority. The State Planning Commission has served in an advisory capacity on the problems at Nashville and was instrumental in getting the area mapped.

Under the terms of a coöperative contract between the State Planning Commission and the TVA, we are keeping a community planner in the Valley area. He is serving as planning technician for a number of communities affected by the TVA program. In particular, the work at Jefferson City, which is close to the Cherokee dam site, takes on a defense aspect because Cherokee is being rushed to completion ahead of schedule to supply additional power for defense industries.

The plant of the Aluminum Company of America is at Alcoa in Blount County but the area affected by the expansion includes part of the adjacent county of Knox. Local planning commissions in this area are now in the process of being organized. With the beginning of the next fiscal year on July 1, we expect to assign a planner from our staff to the area. He will be assisted by the planning staff of the TVA and by Mr. Paul Oppermann, who is helping us under the terms of an agreement with the Federal Housing Administration.

In the vicinity of the ordnance plant, we have not yet gone much beyond the exploratory stage. Considerable local interest has been expressed in planning, but the situation is somewhat complicated by the multiplicity of governmental units which are or will be affected. We are further handicapped by not having sufficient personnel to assign a man to the area.

At Camp Forrest, I am forced to admit that we have met with no success. The entire lack of interest in anything beyond immediate gains is in a large measure responsible for the absence of tangible achieve-

ments. Coupled with this has been a reluctance on the part of the Federal Government to take any action in the absence of local initiative. We have, during the past several months, repeatedly called attention to the urgent need for additional housing facilities. Only recently, however, has it been decided to expend a million and a half dollars there for housing.

Our planning work in defense areas has varied from almost complete success to almost complete failure. It seems obvious to me that the States and local governments should not be expected to assume all of the burden for planning for defense areas. It would be only the part of wisdom for the Federal government to share this responsibility.

Quite extensive army maneuvers are to be held in Tennessee beginning about the first of June. We have been requested by the military intelligence division of the Second Army to assist in surveys of the area involved in the maneuvers. Our part involves the collection of all possible factual data about the area—its climate, its people, its resources, its industries, its stocks of foods and other vital materials, and various similar factors. We have conceived this survey as a practical way in which the State Planning Commission can assist the army. Consequently, we have assigned all of our available staff to this job.

To these aspects of our defense work I would add a fourth, about which we have done considerable thinking but little actual work—that is, planning for the day when the emergency is over and when we will resume our peacetime ways.

It seems to me that national, state, and local planning agencies will be neglecting their supreme opportunity to demonstrate their value if they overlook this. What the solution is, we don't know. We believe that our local planning work, including the preparation of public works programs, will be helpful. Undoubtedly, public works construction will be used to cushion the shock resulting from the stoppage of defense activities. For that purpose, well-conceived, long-range community plans will be invaluable.

Planning as we now conceive it probably will be no more than a partial solution to post-emergency problems. Possibly, the economic and social implications are too vast for state and local agencies to cope with. But, I think that this is a matter for careful thought and serious study by all of us. Certainly, the "back to normalcy" slogans that followed the last war will not be enough.

Why Parks in the Mississippi Valley?

COLONEL RICHARD LIEBER, Chairman of Board, National Conference on State Parks, Indianapolis, Ind.

TWENTY years ago we founded the National Conference on State Parks. Today we find ourselves on the Mississippi, as it flows past the State of Illinois. Across the River to the north in neighboring Iowa lies Des Moines where we started. Of those who founded the National Conference not many are left. Only a few weeks ago another of those valiant torch-bearers who had lent strength and direction to the young movement passed on. The loss of William A. Welch is a great one and the void that has been caused can only be filled in time by those who walk in the departed's footsteps and carry on his valiant work.

Especially in the earlier years of our organization we had to depend on each other in a far greater measure than is necessary today. Today we fortunately have a corps of expert technicians in the Branch of Recreational Planning and State Coöperation of the National Park Service.

I don't mean to say that everything they propose is technically sound but fortunately there exists a free spirit of criticism which in its persistently inquisitive demand to be shown seems to stem from the adjoining state of Missouri. Our old methods were fitting the time and circumstance. State park service was new and often unheard of and had to be tried. It therefore became a matter of trial and error. The modern development of state parks, added to which are recreational parks, of course demands a more refined approach.

Under these circumstances it would seem that the States which have been the beneficiaries of coöperative state park work through the National Park Service would consider it good business to preserve trained and competent park talent, but far from it. Our experience has been that States have made solemn promises of coöperation and have not kept them. Furthermore the self-seeking politicians in those States which change with every election have deceived the people by unwarranted changes in park personnel for political aggrandizement. No one will benefit from upheavals such as are unfortunately the regular experience. We must become active in helping to create a merit system protecting not only those Park workers who have made that labor their life's interest and have paid for the education, but the properties themselves; and inasmuch as it is the general public which suffers from the political disorder it must be the public itself which should demand a better order and a better service.

It is no secret that some such occurrences were the reason why we

were compelled to abandon a meeting in the State of Georgia. Fortunately for us the park-minded authorities of Illinois came to our rescue and invited us, as they have done upon other occasions, to meet here and hold counsel with them. This was a happy termination of an annoying difficulty and I desire to express in advance our appreciation to Governor Green, Director Rosenfield, Chief Engineer Jenkins and the park officials. Before we are through we undoubtedly will find cause to thank many more, especially the persons who will try to take a pot shot at that nefarious individual who with shrill and disharmonious blasts disturbs the peace and quiet of the morning.

I would like to appoint our friend Carter Jenkins the chairman of a committee to surround himself with a sizable number of these horn-tooting Gabriels to march upon some State Houses that we know of to wake up the kind of politicians who seemingly still believe that democracy is the luxury of a rich nation, and to tell them that, if no other argument is of avail, the present ominous world situation should make it clear that material and human waste amounts to treason. Yes, we are rich, so rich that no other country could afford the political bunglers we suffer from.

In the interest of national defense the conscription act should logically be extended to candidates seeking office. Would it not be grand if we could pick high grade quality, and eliminate the unfit and unqualified from any and all public places? As we are determined to defend our institutions and our American way of life, the finest human material in the front line should be complemented by the same high quality in the rear of them. At least that is my idea of total defense.

Arriving at this point I make the interesting discovery that I am not expected to speak on political antics but rather on the subject, "Why Parks in the Mississippi Valley?" My preliminary answer would be that there is no other vast area in all of America so important in the forming of social, political and economic history and none any richer in the variety of its scenery. Furthermore "the significance of the Mississippi Valley in American history has lain partly in the fact that it was a region of revolt. Here have arisen varied, sometimes ill-considered but always devoted movements for ameliorating the lot of the common man in the interests of democracy." The fact that in the vast spaces of the Mississippi Valley forces of social transformation and modification of its democratic ideals sprang up was certified as early as 1860.

Frederick A. Turner, author of the above quotation, reminds us that as the seaboard south had transferred the mantle of leadership to Tennessee and then to the Cotton Kingdom of the Lower Mississippi, so New England and New York resigned their command to the northern half of the Mississippi Valley and the basin of the Great Lakes.

He refers to Seward, the old time leader of the eastern Whigs, who had just lost the Republican nomination for the presidency to Lincoln, who said, in a speech at Madison, Wisconsin, in 1860:

> The empire established at Washington is of less than a hundred years' formation. It was the empire of thirteen Atlantic States. Still, practically, the mission of that empire is fulfilled. The power that directs it is ready to pass away from those thirteen States, and although held and exercised under the same Constitution and national form of government, yet it is now in the very act of being transferred from the thirteen States east of the Alleghany mountains and on the coast of the Atlantic ocean, to the twenty States that lie west of the Alleghanies and stretch away from their base to the base of the Rocky Mountains on the West, and you are the heirs to it.

In this connection it is interesting to observe that in the Civil War period Illinois furnished Abraham Lincoln as President; Mississippi, Jefferson Davis for the Confederacy. Both Grant and Sherman came from the Mississippi Valley and the latter's remark is well remembered to the effect that, "Whatever power holds that river can govern this continent."

Turner concludes by pointing out that the Mississippi Valley has furnished a new social order to America. Its universities have set up new types of institutions for social service and for the elevation of the plain people, and he closes with the hope that the mighty Valley may have a significance in the life of the Nation even more profound than any which he had recounted.

Whenever a people reach the stage of comfort and well-being, both physically and spiritually, they will become retrospective. They will want to tie their new-found happiness and enlarged prosperity to things of the past, instinctively feeling that they are non-separable from that past. Historic or religious shrines exert a great power over our thinking and feeling. Noble streams, lovely valleys, deep forests and towering mountains, enclosed by the two great oceans—still pretty good friends of ours—all become a matter of national pride and a source of strength. Wherever we go now, beauty and objects of historic significance are increasingly protected and preserved, not for their own benefit but for that of ours and yet unborn generations.

America should not and cannot be judged by Wall street, Pearl street, Chestnut or Court street, but it may be judged by the steady stride in advance, overcoming all difficulties and handicaps in the settlement of this great country of ours and in its irresistible wave-like advance from the East to the West. It is well, therefore, that we have bethought ourselves in time in this part of our country to remember our history, to recognize its landmarks, to save and preserve places of natural beauty and to call all of those things our national shrines.

We are entering a phase of history which will test both our stamina and devotion. Events are in the offing which will try men's souls. The home, the school, the church, will bravely continue to function. To preserve unshakable confidence in those institutions which have pro-

vided life instead of mere existence; home, church and school have a right to ask us, are you keeping a firm hand on the work you have been entrusted with? Will you continue to provide happy days in God's lovely world and help keep it lovely and adorable? I think right there is our place during the present emergency. As I rightly understand the term "Total Defense," it means that each of us in his chosen or appointed office should do his very best in a thorough manner, and the better he does it in his own, albeit limited field, the more will he be of fitting service to the whole.

I have little patience under the circumstances with those busy bodies of volunteer service who travel at tremendous speed on an idle pulley, but I have still less with those who seek in the present grave and momentous state an opportunity to reach out towards a distant horizon for new activity instead of doing their best to maintain discipline, self-restraint and order within the limits of their own calling.

This defense of true state park values against encroachment of secondary features I have made over and over again. I have insisted upon the separation of scenic and historic parks on the one hand from recreational parks and all the rest of outing areas on the other, in the interest of both.

Most States have asked for Federal help and received it. All have made binding promises; few have kept them. What is to become of the huge investment of millions and millions of dollars in state and so-called state parks? With few notable exceptions state assemblies have made inadequate if not miserly appropriations. Likewise in great minority are those States which have found supplementary sources of income for their park work. Altogether more and still more help is demanded from the Government. The present attitude of recumbent States is harmful if not destructive to both park and recreational effort.

There should be made an immediate investigation into the whole fiscal park and recreation set-up as it depends upon Federal help. Sufficient capital substance has been advanced to them to justify information to ascertain whether the individual States will protect this investment or not. This investigation by all means must include state parks and state recreational areas alike. If we would insist at this time exclusively upon preservation of the threatened integrity of state parks, the results in the recreational field and the investments therein would be disastrous. State after State would shake off its responsibility for maintenance, make its own decision which few properties should be protected as state parks and set adrift all other areas. Such action should be forestalled by National Park Service initiative.

In either event the liquidation will be heavy, but the surviving areas at least will have a chance to protect the original investments while the hopeless ones will no longer be a source of waste. If we do

not separate, even at this late time, the sound from the unsound, the whole park and recreational apple barrel ultimately will be found corrupted. In support of this essential self-limitation of effort, and with full approval of the declared policy, let me quote two paragraphs from Director Drury's admirable memorandum of March 27.

> The service is charged with the custody of the outstanding natural spectacles and historic sites of significance to the Nation. Its primary obligation is to protect these unimpaired for future generations, and to administer them for the present so as to emphasize and make available their highest values, . . . It makes for national morale—and is our greatest contribution to national defense.

And again:

> We do not look upon the national defense program as providing an opportunity to expand our functions. Our service to the Nation in the long run will be judged by the success with which we have cared for the properties entrusted to us and met our primary responsibilities.

No better advice could be given to state park authorities.

As state park men, let us try to remember at all times the primary purpose of our creations. Preservation of beauty and the offering of healing media for bruised or dejected souls. Converse with nature restores happiness, communion with its mysterious forces, Antaeus-like, fills us with renewed strength and rids us of fear. It is the land and all it contains which performs the miracle. That same land, the native soil, yes, the "Country" reaching from Ocean to Ocean, from the Lakes to the Gulf. Often as we forget, yet forever are we turned back upon this marvelous treasure.

"My country 'tis of thee!"

My country? It is mine only today. Tomorrow it belongs to my children and tomorrow to my children's children. And that being the case let us strive with all the strength that is ours so to live and to manage that to them it shall remain what it ever has been to us; the same sweet land of liberty, of opportunity and of much sunshine.

The Origin of Pere Marquette State Park

PAUL B. COUSLEY, Editor, Alton Telegraph, Alton, Ill.

AT your invitation I am telling the story of the best friend I ever had, one who was my pal from days when we were boys of ten years, a period of fifty-four years, thirty-five of which we spent as harmonious business partners. Death claimed John D. McAdams last February 1, as the result of a fatal automobile accident near St. Augustine, Fla. He was deeply interested in your organization, he knew many of you personally and had enjoyed your coöperation in the great work he promoted.

The story of Marquette State Park depends upon many threads of circumstances. Geologists and archeologists can read to you the story

of the far distant past. They may tell you of the days in the ages when the earliest forms of life were numerous and thriving here—a fact certified by their fossil abundance in the most ancient rocks in the neighborhood. They may tell you of changes wrought in the earliest glacial periods by the waters which had emptied from the northern territory into the Gulf of Mexico being backed up by the debris left by the glaciers and sent off through another route to the Atlantic by way of the St. Lawrence, creating this delightful Illinois river valley which was to be the happy hunting grounds of the aborigines who dwelt here. What is today a delightful park area was long the resort of the races who came afterward. Here they lived and loved; here they fought their battles with invading foes; here they buried their dead and left as their records the weapons, the trinkets which the archeologist has patiently searched out in their graves, hoping through these to find a key that might unlock unguessed mysteries of the ancient races.

About 95 years ago there was born in Jersey County, near Otterville, a boy whose life was to be devoted to studying records of the past, as written in the rocks and as left in the great burial mounds which ancient peoples made in this park area and vicinity. He was William McAdams, a name which was to go down in history among men of science who sought what are still secrets, unanswered mysteries of the past. In his early boyhood he became absorbed in collecting relics he would find after floods in creek beds, or turned up by plowmen cultivating their fields. He did not measure up to the standards of the neighborhood, not even of his own family. His father, family tradition said, disapproved of his son William wasting his time gathering bits of carved stone, and pieces of broken pottery; occasionally finding an old weapon or tool of copper. The father on at least two occasions, after he forbade his son to waste his time in such pursuits, hoping thereafter to discourage him, dumped his treasured relics into a pond. The son, secretly searched them out and patiently kept on with his hunt for more and more of those treasures of the ancient races.

Further, he acquired books and studied wherever he could find information along the lines he most loved. He continued his search for knowledge as he passed from boyhood into manhood. When he had married and had a large family of children, he would take his sons and their friends with him in his search for relics of the past. To the boys he was "the Professor." Sitting around the campfire at night when he was on one of his expeditions, he would hold the boys spellbound as he related to them stories of Indian wars, battles and adventures. He would teach them how to dig for the buried treasures and how to take care of them. He would, so to speak, turn the pages of the past as revealed in the rocks and recount for the boys the knowledge men of science possess of how the earth was formed. He never gained worldly wealth but he did accumulate a great store of wisdom, most of it taken

from the ground in this very park area. To this park area he was what Thoreau was to Walden. It was his happy hunting ground.

William McAdams, it was, who pointed out a portion of an old wooden cross which Pere Marquette had set up to mark his landing place on the Illinois river. It was that knowledge he preserved which made it possible later to mark the spot with a permanent stone cross suitably inscribed for posterity to view. Pere Marquette was the first white man to set foot on the ground now comprising Marquette State Park. He it was who first wrote of the Indian painting of the Piasa bird on the cliff at Alton and made sketches of the pictured dragon. Many white people were to come later, to settle in the peaceful valleys, there to live to great age amid the quiet of the scene, drinking from the crystal clear springs which gushed from the hill sides into the valleys and made their way to the river.

But it was William McAdams who learned the most about this area and whose knowledge impressed upon the next generation the need of something being done to preserve for the people forever this natural playground. Never did he lose his interest in this place. Here he made his greatest discoveries, relics which were rare and some of them remarkably perfect. On the high point in the park bearing the name McAdams peak, with his boys and other friends he excavated relics of people long ago extinct. Here he collected relics for the Smithsonian Institution at Washington, and for the Chicago Columbian Exposition of 1893. Here he unearthed treasures which went into other great museums of natural history. He sold his relics because that was what circumstances forced upon him so that his large family might have necessaries of life.

Like Peter Pan, William McAdams never grew up—at least not to such manhood stature as would make him lose his interest in geological and archeological facts which enthralled him. He loved best the society of boys and young men, but his companionship was sought, too, by wise men of science who listened to him carefully.

In the course of time the Mississippi he so deeply loved claimed him as he was sailing his boat, Trilobite, to join his sons and their friends who were on a camping trip up river. His body was recovered from the river after a few days, and he was buried with honors. He left a family destined to make fame for themselves. They distinguished themselves in business, literature, music and other fine arts.

Among these children was a son, John D. McAdams, my partner in business for 35 years and my close friend for 54 years. William McAdams passed on to that son his vision and imagination. That son never cooled in his affection for this park site. About ten years ago he was moved by a mighty urge to launch a movement for the building of a park here. From that time on, he thought and talked of little else. At first, there seemed little hope because of the need of a highway for the public to

approach the park. There was only a many-mile stretch of bad dirt roads.

When the prospects seemed darkest, the way was suddenly opened. Harry H. Ferguson, a retired railroad man, in 1927 began to prepare for his great ambition, that of being a breeder of blooded Jersey cattle. He bought a large tract just below the park site of today and began laying his plans for stocking the place with imported Jersey cattle brought from their native isle. One night in 1928, Mr. Ferguson invited John McAdams and me to spend the night at his home. We discussed many topics that night. John McAdams told Mr. Ferguson of the old wooden cross Pere Marquette had set up as a monument, and which had survived through the boyhood days of his father, William McAdams. That night Mr. Ferguson agreed it would be a good idea to set up a more permanent memorial, which was done, and the dedication on Sept. 9, 1929 was the occasion for a great gathering. Tens of thousands of people flocked to the spot where the cross had been set up. Among those who came was Governor Louis L. Emmerson. Dignitaries of the Catholic faith took part in the unveiling and consecration of the stone cross. To reach the spot where the ceremony was to be, the Governor and all the others must travel many weary miles of dirt road from Route 67 to Grafton. There was then no hard road. The Governor was so choked by the dust he could hardly speak. He manfully did his part under difficulties, and later declared his intention of seeing a hard road built to Grafton from Route 67. When the road was built the last valid objection to creating a state park on this site was removed. The State agreed to give half of the $50,000 needed to acquire the first 1,800 acres of the park. Then John McAdams got busy to raise the $25,000 the State had stipulated that the public must give. The year 1931 was consumed by John McAdams planning the ground work. The money was raised in Madison, Jersey and Calhoun counties, under his leadership. Transfer of the land was completed May 20, 1932, the State then taking over only 1,600 acres for $44,895. This acreage has since been doubled by Federal coöperation through efforts of the National Park Service. CCC camps were set up to prepare the rough wooded land so the public could enjoy it. The park opening took place May 19, 1935, with a great celebration.

With his dream realized for Marquette State Park, John McAdams yearned to make come true another vision of his father, without knowing it was such. About 65 years ago the father had planned a river level highway from Alton to Grafton, but obstacles were too great, financial help inadequate. That riverside drive along the Mississippi was to sleep until William McAdams' son, John, 65 years later resurrected it. There was coincidence in the fact that when John McAdams got started with the river highway project, his partner, who had been going over the old files of the *Alton Telegraph*, pointed out to John McAdams

the newspaper account of his father's unsuccessful highway-building efforts in years before John McAdams was born.

The river-level highway is now well under way between Alton and Grafton—a project jointly built by the State of Illinois and the WPA. The tragedy which prevented John McAdams from seeing the completion of the highway, forced a quick decision by others to see the project through. Within two days after his death, announcement was made that the river parkway project would be hereafter known as the John D. McAdams Parkway.

On August 3 of this year a bronze tablet will be unveiled, as the tribute of an unnamed donor who makes the gift through the sponsorship of the St. Louis Regional Planning Commission, to dedicate the parkway to the memory of John D. McAdams whose vision and energy and never ceasing industry made possible the realization of both Pere Marquette State Park and the highway from Alton to connect with the park road.

These are but two of the projects to which he devoted his time and his thought. His home city is studded with memorials the public looks upon, and then thinks of John D. McAdams. Of him it is true, as of Christopher Wren when it was said of him in St. Paul's Cathedral in London: "If a monument you seek, look about you." He left the world much better than he found it. Always, it seemed, he acted to help those who, like him in his boyhood day, had needed a friend to give a helping hand.

Navigation and Other Uses, Mississippi River Waterways

COLONEL MALCOLM ELLIOTT, Corps of Engineers, War Department, St. Louis, Mo.

CONSERVATION in its broadest sense implies the development and exploitation of natural resources under such orderly and conservative methods as will not only produce contemporary enjoyment of these values but also their perpetuation for posterity. This philosophy applies to the development of waterways just as it does to any other constructive development. The U. S. Congress has authorized and appropriated public funds to create a navigable waterway system and many projects for flood control in the Mississippi Valley. We can not assume that Congress intended that this work be prosecuted and installed with utter disregard for other natural and national values.

The navigation improvements, mainly locks and dams, have radically changed the low water character of both the Upper Mississippi and Illinois Rivers. These streams in their natural state were, in low water seasons, shallow winding streams which generally formed themselves into series of pools separated by sand or gravel bars over which the

river flowed swiftly and irregularly. With the dams in operation artificial pools have been created which are much longer, wider and deeper than the natural pools and the difference in elevation between consecutive pools instead of being just a few inches, as in the natural state, is seldom less than 7 to 8 feet and may be as much as 30 to 40 feet. The abutting land is overflowed to a considerable extent especially in the downstream portions of the artificial pools. At the upstream ends of the pools however, there is generally very little overflow caused by the dams.

The direct damages due to the overflow, where it is possible to evaluate them, are paid to the sufferers. However, it is conceivable and probably a fact that this change in character of the stream does damage to some of the fish and wildlife that depended for existence on the natural environment that existed prior to the erection of the structures. I have read that in the case of the Keokuk Dam mussels which previously grew in that section of the river can no longer exist and the button industry depending on these shells has been destroyed. However, I am informed that as a whole the new environment supports fish and wildlife to a greater extent than the natural rivers did before the structures were built. The wide ponded areas created by the dams are undoubtedly beneficial to water fowl and new types of fish are now being caught in reasonable abundance.

In the Upper Mississippi Valley, the ponding of water for navigation submerged much of the marsh land that was used as a Federal refuge for migratory water fowl. To offset this loss large areas, when acquired for flowage in connection with the navigation project, were turned over to the Wildlife Service for administration in the interest of conservation. This wildlife area as thus supplemented is equal if not superior to the original area. It is understood that the Wildlife Service now intends to acquire new areas south of the present upper river wildlife areas so that eventually they will control tracts at suitable intervals where birds may rest, feed, and avoid sudden death during their migrations.

Of course many trees have been destroyed by the ponding of Mississippi and Illinois waters for navigation. Rather than leave these trees standing in the water to die and become eyesores, if not impediments to navigation, they were in general cut down and removed. The sight of this wholesale clearing and burning was at first disheartening but in a surprisingly short time new growth of willows, brush, weeds and vines appeared, covering the unsightly stumps. The stabilized levels of the waters encouraged muskrats and the wide shallow areas of aquatic growth are favorable to water fowl and fish life. The scenery is enjoyed and admired by all visitors.

In the area just across the river from here, known as Calhoun Point, the National Park Service, the State of Illinois, and the U. S. Engineers coöperated in a notable manner for development of a wildlife area. In this locality it was deemed advisable to leave the trees standing, to die

after the pool submerged the land but also to decay and produce bugs and insects which would in turn be the food for aquatic life. To obviate the possibility of fallen trees floating into the navigable channel and becoming a menace or impediment to navigation, the National Park Service, employing the CCC, agreed to raise a low levee along the river side and plant trees thereon to form a barrier to prevent the fallen trees in the interior of the area floating into the channel. It is understood that eventually the administration of this wildlife area will be turned over to the State and that the State and National Conservation agencies are highly pleased with the arrangement. The proposed use of the area will not be detrimental to navigation and the Federal Treasury has been saved the cost of clearing the land.

The navigation structures have incidentally brought a great improvement of the rivers for uses of recreation. The dams increase the water areas and depths and stabilize to a great extent the surface levels during the low water periods, corresponding generally to the vacation seasons, and the waters are therefore much better suited than in their natural state for swimming, boating, and other water sports. These advantages are particularly applicable where the river is near a Park such as this. There might very well be organized at this park and perhaps at Starved Rock also boating and swimming facilities with proper shore features available to the public at small charge. Certainly the advantage to this park of having along its front a wide body of comparatively still water of suitable depth is apparent to all who come here. It is true that between the park and the river there is a strip of land owned by the Federal government. Federal officials are not authorized to transfer ownership of this land to the State without specific Act of Congress and adequate compensation, but there does exist authority to lease the land at an equitable rental.

All who see the Mississippi and Illinois rivers in this section of Illinois and Missouri are aware of the great increase in the recreational use of the waters by the people. Hundreds of motor boats, sail boats, row boats and canoes have appeared on these waters in the last few years. This aquatic playground is surely an additional attraction of the region and enhances the value of this beautiful Illinois Park.

In this section of Illinois, there are many flood control projects of the levee type which have greatly enhanced the values of rich bottom lands and diminished the flood hazards of the farmers. There are no reservoir projects in this area and up to this time no such project has been considered economically feasible. The dams in the Illinois and Mississippi rivers do not control floods in any degree as the pool storage capacities are insufficient for substantial mitigating effect on floods. The dams are, however, of the movable type which permits their being opened either by raising or lowering so that they will not substantially aggravate flood heights.

The main purpose of the presently authorized river improvements is to improve navigable channels to provide for the economical movement of commodities for the general welfare. It is a mistake to believe that the development of navigation is intended to supplant or even seriously compete with other means of transportation. Each type of carrier—rail, highway, air or waterway—has a field in which it can best meet public needs and the ideal system would be one in which each carrier renders the service for which it is best fitted.

The Mississippi River system as a whole comprises the north-south axis between Twin Cities and the Gulf of Mexico, the Illinois River connecting with the Great Lakes, the Ohio River and tributaries serving the industrial area west of the Alleghenies and the Missouri River serving the grain belt. These waterways are well located to permit shipment of the resources of the areas served and movement of raw materials and manufactured products from points of origin to points of use. Thus bulk cargoes of grain can be moved by waterway from the fields of the midwest to domestic markets or seaport for foreign trade and fuel, structural materials and manufactured articles can be moved from industrial areas to non-industrial domestic markets or to foreign markets. The effect of the savings in transportation costs on the commercial and industrial development of the Mississippi Valley are likely to be far reaching and beyond our present comprehension.

The Mississippi River above the mouth of the Missouri and the entire Illinois River and waterway have been improved by locks and dams which form pools of sufficient depth to accommodate vessels drawing up to 9 feet. The Ohio River in its entirety and several of its tributaries have also been improved by locks and dams. The Mississippi River below the mouth of the Missouri has been improved by regulating, dredging and channel realignment and also affords 9-foot navigation, except sometimes during brief periods when because of low flow the depths may be somewhat less. These brief periods of shoal water are not generally of serious consequence where the bottom of the river is sand or mud, as boats can drag over such shoals without damage. However, at Chain of Rocks, near St. Louis, a rather serious condition exists as the bottom is hard and the risks incident to groundings are not negligible. A project for the improvement of this reach has been approved by the War Department and now awaits Congressional authorization.

The construction of the locks and dams needed to complete the Mississippi and Illinois River systems above the Missouri has all occurred in the decade 1930–40. In 1930 the Mississippi River commerce above the mouth of the Missouri River was 110,000 tons exclusive of local movement of sand and gravel which is not generally dependent on deep waterways. In 1940 the total movement was about 3 million tons, also exclusive of sand and gravel, or approximately 27 times the

1930 traffic. This is 60,000 carloads (50 tons per car) or 1200 50-car trains, roughly 3 trains per day every day of the year. The average length of haul in 1930 was 130 miles; in 1940 it was 240 miles.

The commerce in the open-river section of the Mississippi River between the Missouri and the Ohio has also been stimulated. In 1930–40 the total in this section, exclusive of sand and gravel, has grown from approximately 700,000 tons to nearly 3 million tons—a four-fold increase.

The Illinois River and Waterway, from Grafton to Chicago, has shown an even more spectacular growth of commerce. In 1935 the total commerce on the entire waterway was about 1,800,000 tons, most of which was local movement in the Chicago Drainage Canal. In 1940 the tonnage was nearly 6,000,000 tons, and in 1941 there was another substantial increase.

In the present war emergency we are thankful that the waterways have been developed to their high traffic capacities. The defense program has entailed a large increase of freight movement—the railroads have all they can handle. New ordnance and aviation factories are located adjacent to inland waterways. These require raw materials and the distribution of finished articles of defense. The waterways are now prepared to facilitate increased freight movement and relieve any such congestion of traffic as occurred in 1917–18. All savings in transportation costs will of course lighten the defense load to be carried by the taxpayers.

Water, fortunately, is one natural resource which nature renews with more or less regularity. Yet without intelligent use and conservation the natural supply of water may fail to meet our needs. One of the most destructive uses to which a flowing stream can be put is to carry off sewage. The drainage from even small rural communities will contaminate small streams and of course the sewage from a large city will render a good-sized river not only unfit for many other uses but an actual menace to comfort, health and welfare.

Progress is being made fortunately in installation of sewage purification works but there remains much to be done to cure this evil of pollution.

The benefits resulting from the intelligent combined use of water resources can be accomplished only by coöperative effort on the part of Federal, state, and local agencies, and groups and organizations of citizens. Happily in this section of the Mississippi Valley the necessary coöperation has been given cheerfully and effectively. Under the present and preceding administrations in Illinois, the Governor and his staff have aided and encouraged the work committed to the Department which I serve; Mr. Kingery, Chairman of the Illinois State Planning Commission, Mr. Rosenfield, Director of Public Works, Mr. Jenkins, Chief Engineer of Waterways and many others have cooperated with advice and service in many instances.

Relation of Public Recreation to Wildlife Management

RAY C. STEELE, Superintendent, Upper Mississippi River Wildlife and Fish Refuge.

THE Mississippi river has within the past few years undergone a major face-lifting operation with the result that many features inimical to the best interests of wildlife between Alton and the Twin cities of Minneapolis and St. Paul have been corrected.

A series of low dams has been constructed to provide a satisfaëtory navigation channel, and the impoundment of water above these structures has benefited wildlife in general because of improved habitat. Prior to the construction of the dams, the fluctuation of waterlevels interfered seriously with the growth and maturing of aquatic vegetation which is so necessary for food and cover for wildlife frequenting the area. The structures do not provide for the control of flood water, however, and during periods of heavy run-off normal rises above pool elevations occur; but the water does not recede beyond a fixed elevation and the area is no longer subject to the devastating effects of drought and low water. Flooding usually occurs at times when it does not seriously interfere with the growth of aquatic vegetation. Many conservationists were alarmed and fearful of results when construction of the dams was proposed. Studies, however, disclose material improvement in habitat throughout the area following the impoundment of water, and wildlife has responded to the new conditions quite satisfactorily.

In 1924 Congress authorized the establishment of the Upper Mississippi River Wildlife and Fish Refuge and defined the boundaries as extending from Rock Island, Illinois to Wabasha, Minnesota, on either side of the Mississippi river in the four States of Illinois, Iowa, Wisconsin and Minnesota. This refuge was to be administered by the Bureau of Biological Survey, of the Department of Agriculture, and the Bureau of Fisheries, of the Department of Commerce, which bureaus have now been consolidated into the Fish and Wildlife Service, of the Department of the Interior. The authorization provided for the acquisition of bottomlands to the extent of approximately 160,000 acres, a substantial part of which has now been acquired and is under management. It is the policy of the Service to administer the area so as to provide maximum protection to the wildlife and yet permit recreational uses consistent with good conservation practices.

It is estimated that more than six millions of people live within a day's drive of the Upper Mississippi Refuge; it is, therefore, important as a recreational area. Naturally it has been necessary to impose restrictions on the use of certain parts of it. Fortunately, the regulations are sufficiently broad to permit reasonable use and at the same time insure protection and sanctuary to the wildlife frequenting the area.

The slack water pools above each of the dams vary in length from 10 to 30 miles, and it is the policy of the Service to administer one or more inviolate sanctuaries for wildlife in each of the pools. These sanctuaries are selected on a basis of natural attractions to wildlife, adequate food and cover, well-defined natural boundaries, ease in patrolling, proximity to centers of population, and general suitability for administration. The areas vary in size but are sufficient in extent to insure sanctuary to all forms of wildlife frequenting them, and it is surprising to observe how quickly the wildlife recognize the boundaries of these sanctuary areas.

The question, how can hunting, trapping, and fishing on a wildlife refuge be justified, has been raised. The answer is that constructive game management provides for both production and harvest of a crop. The first consideration is adequate protection and restoration of wildlife, and the next is the providing of recreation consistent with policies that will insure perpetuation of satisfactory wildlife populations. The response of wildlife to the protection afforded has been gratifying, and the people living in the vicinity of the refuge have been given outstanding recreational opportunities.

It is difficult to appraise accurately the monetary worth of the refuge to the people; the fur crop produced on the area, however, is of importance and indicative of the cash value to the people. In one season people living nearby harvested on the refuge under appropriate regulation to insure perpetuation of the crop, furs amounting to more than $100,000. The fur crop is taken at a time of year when employment is at a low ebb, and little investment is required to produce the crop. The money paid to the trappers for the furs comes from the fur centers.

Moreover, probably most of the money earned by the trappers is in the trade channels of the cities and villages along the river within a comparatively short time after it is received; therefore, the fur crop is of direct benefit to the majority of the people in the river communities.

It is indeed fortunate that such an important wildlife and recreational area is in public ownership and administered for the benefit of the people. There is probably no other area in the entire United States comparable in size and supply of game, fur and fish that is available to the public. Many persons visit the area because of the beauty and charm of the river and its vast marginal marshes lying between precipitous limestone bluffs.

During the open season thousands of man days of hunting are enjoyed on the refuge by sportsmen, who come from far and near to take advantage of recreational opportunities that would not be available to most of them if the area were in private ownership. Duck hunting has been referred to as a rich man's game, but here all persons enjoy equal privileges and opportunities to engage in this healthful outdoor activity, which is also of value in supplementing the food supply. Without a doubt, if opportunity permitted, the wealthier individuals and small

groups would gain control of the majority of the best shooting grounds to the exclusion of sportsmen who could not afford to pay for the privileges.

The Mississippi flyway is probably the greatest of the four major flyways on this continent for migratory game birds, and the Upper Mississippi Refuge is one of an important chain of refuge administered by the Fish and Wildlife Service from the Canadian line to the Gulf of Mexico. These refuges afford the birds an opportunity to rest and feed unmolested during their fall migration southward. It is equally important that hunters living along this great migration route have reasonable opportunity to share in the harvest of the annual crop of migratory game birds. These national refuges are also of value to the birds as feeding grounds on their annual spring migration northward, and more and more birds are finding them attractive nesting sites. The number of ducks nesting on the Upper Mississippi River Refuge is increasing.

A marked improvement in food, cover, and water conditions has been made on the Upper Mississippi Refuge since its establishment. The area is constantly patrolled by trained personnel to insure protection to the birds and improvement of habitat by planting desirable food and cover plants. The stabilization of water levels and the more extensive marginal marsh areas created in the several pools have increased the food supply, both in quantity and variety, most satisfactorily. Prior to the stabilization of water levels the Mississippi valley did not produce maximum quantities of varieties of foods attractive to wildlife, primarily because of the lowering of water levels at a time when it hindered the growth and maturing of much of the vegetation.

Fishing is permitted in accordance with the laws of the various States, except on areas reserved and set aside by the Fish and Wildlife Service for the propagation of fish. It is difficult to estimate the number of persons who fish within the refuge during the open season. Like the wildfowl, fish have responded to the improved environment, and it is reported that never before in the history of the river have fishermen enjoyed such results as they do at the present time.

It is important in heavily populated areas to provide public shooting areas. It is also important that resting and feeding areas be maintained for the birds, and a balanced management program will therefore produce mutual benefits to both wildlife and hunters. Without sanctuary areas where the birds can rest and feed unmolested, heavy shooting would soon cause the birds to move southward. Although sanctuaries may have the effect of reducing the kill during peaks of concentration, it is believed that by holding the birds on sanctuary areas, reasonable shooting opportunities are available to a greater number of people throughout the season than would otherwise be the case; therefore, a management program is desirable and unquestionably will be of much benefit and insure to a large number of people reasonable recreational opportunity.

Recreation in Defense

BRIGADIER GENERAL JAMES A. ULIO, Chief of the Morale Branch, United States Army, Washington, D. C.

THE aim and purpose of the Army's whole system of training is to produce soldiers who are effective fighting men. In doing this, recreation has been found to be of use as a definite factor, and so we study it, just as we study problems of shelter, rations, clothing, sanitation, discipline, drill schedules—everything in the soldier's routine of life and duty.

The difference between civilian and military duties, between civilian and military people, are differences but in degree of emphasis on one or another habit or duty. They are the same people in different surroundings and under different necessities. One who makes good in civilian life would with proper leadership make good in military life. A man is a man, wherever you find him. Skill is required, fidelity is required, courage, obedience and leadership are required, for high morale in the Army or in the home, farm or factory.

Only, a soldier may need some of these qualities in very high degree, in some emergency where life or death, victory or disaster, are the stakes. He may need a discipline that means an inner strength of his own, to carry on when he is alone in the night with no leader within sight or hearing. In order for a man to acquire this mental and spiritual self-control, a training program is necessary that is more rigorous, and calls for a more sustained driving effort, than he would find in the ordinary occupations of civil life. This in turn means that the part played by recreational hours in the soldier's rigid schedule is just that much more important.

In your building of a system of state parks, you have a number of ends in view. Not only do you provide spaces where city dwellers may find hours of relaxation in the open, but with a purpose of civic education you preserve historic traditions by marking and setting apart places and areas. Historic shrines help to keep a Nation from forgetting its past. It is not primarily for the amusement of the people that you provide these parks. The good times they enjoy on their vacation visits are a by-product. If it were not for the fact that they become better citizens as they seek rest for their bodies and change of scene for their minds, you could relax your civic efforts and let them find their own amusement.

In its full and true meaning, a soldier's morale is the net sum of all his reactions to his surroundings. It does not establish morale merely to make a soldier comfortable or to amuse him. If a soldier is in comfortable mood because he has three squares a day and liberal hours off duty, it does not necessarily follow that he has good morale. Morale is evidenced when in the face of hunger, privation and mortal danger, in spite of every

adverse condition, the man does his duty with unswerving loyalty.

You cannot fool the enlisted man and you should not try. When he is not on a battlefield but in a camp, where it is practicable to provide some recreational facilities for his hours off duty, he is entitled to those things and he should have them. And in your Army the Morale Branch is providing them, the soldiers are using them, and they are better soldiers on account of it.

You will remember that the furnishing of such facilities, and administering them, was during the World War done by a number of civilian agencies, recognized by governmental authority through action by the Commission on Training Camp Activities. These patriotic people rose to a great emergency, met it with devotion and ability, and earned the Nation's thanks. Their experience, however, showed a need for direct coördination and supervision by the Army, as was made clear by the report on morale conditions in the A. E. F., submitted to Secretary Baker and General Pershing by Raymond D. Fosdick, Chairman of the Commission. To quote from the report:

> The task of supplying the needs of the Army along recreational and kindred lines has been left largely to the initiative of the non-military organizations. These organizations work without any particular relationship to each other and the Army is placed in the position of trusting them to supply necessary facilities without any check or follow-up system of its own.

A decision was reached that in any future mobilization the Army should provide for welfare and recreation activities within the limits of military camps. Civilian agencies, however, were and are recognized as the logical administrators of such activities in the communities adjacent to the camps. Military responsibility in military areas; civilian responsibility in civilian areas. An exception is the Red Cross.

Although I touch briefly on this phase of the military morale, I want to emphasize the importance placed by the Army on civilian coöperation. May I ask you to extend your studies concerning it? There is a nation-wide campaign for general support of the United Service Organizations for National Defense, Incorporated. The constituent bodies are the Y.M.C.A., the National Catholic Community Service, the Salvation Army, the Y.W.C.A., the Jewish Welfare Board and the National Travelers' Aid Association.

Some small communities are adjacent to large camps and some small posts are adjacent to large cities. The duty needs equalizing. Civic organization on a national basis is obviously necessary.

You will want to know something of the manner in which the Army has taken up the responsibility which it has assumed. The Morale Branch has been established in the War Department, operating directly under the Chief of Staff, and taking over the morale activities previously handled by the Morale Division in The Adjutant General's Office. The mission of the Morale Branch is to assist the commander in the field in

meeting his responsibility for the morale of his unit. Its duties include the advising of the Chief of Staff on morale matters, welfare and recreation of enlisted men, the relationship of the military establishment with civilian agencies, and the providing of necessary welfare and recreation facilities at posts, camps and stations. Available to the Branch are the advisory services of the Joint Army and Navy Committee on Recreation and Welfare named by the Secretary of War and the Secretary of the Navy, and of Governor McNutt's Assistants, headed by Mr. Charles P. Taft, on Coördination of Health, Welfare and Recreation in civilian communities, especially those adjacent to large cantonments.

Within the Branch are appropriate divisions and sections for special responsibilities. Bear in mind that the whole subject of military morale is its field, though we give our time today to describing the set-up of the necessary facilities for welfare and recreation. These include day-rooms for the companies, regimental recreation buildings, post service clubs, theatres, gymnasiums, baseball and football fields, athletic equipment and organization, chapels, guest houses—all with due regard for local varieties of need and for proportional military population of different posts. Post and unit morale officers supervise and coördinate, working in liaison with chaplains and Red Cross field directors, also with civilian agencies, coördinators and officials in communities and cities. They always act as advisors to and under the authority of the post or unit commanding officer, for morale is a function of leadership.

An important development is the establishment, now going forward, of a number of Recreational Areas. These are camps for weekend vacation periods for soldier groups in rotation, where, under minimum supervision, the men can enjoy sports and diversions in locations selected because they combine the attractions of beach resorts with those of city entertainments.

I want to take occasion at this moment, to express the Army's appreciation of the very helpful attitude of all of you people who are experts in the building and operation of state and other parks. We need your help and we feel that we have it. The National Park Service not only made its experience available, as did the Civilian Conservation Corps, but the actual work done by them under the personal direction of Mr. James J. McEntee and of Mr. Conrad L. Wirth respectively, gave speed and technical correctness to the plan and they have the thanks of all concerned.

Six of these camps are in operation on the Gulf Coast and more are in process. They are available to troops within 150 to 250 miles, according to roads and means of transportation. They can accommodate thirty-five hundred men per week at present, and will ultimately take care of eight thousand per week in the Gulf Coast region alone.

The relaxation from pressure, the change from routine, is not provided for the softening of these men, but precisely for the opposite

purpose, and is done for exactly the same reason that causes an athletic coach to take care that his star athletes do not go stale. These young men are your young men. They are rapidly becoming the strong men of this Nation, and on their condition rests the hope of this Nation for its security. We believe, in fact we know, that the weekend camps I have outlined to you have the same beneficial effect on them that their civilian relatives and friends find, in their holiday travels, at the parks and resort areas which your planning and your administration have made available to citizens.

The only differences are those of location and degree of immediate need. Your civilian has his daily habit of work, and the typical family has its dinner hour, its evening of bridge, its movie party, and once in a while a longer bit of play or travel. There is the change of scene, the vacation, the use of parked areas. Your soldier has his vigorous training program of drill and gunnery, marching, night maneuvering, study. At the end of duty hours he has his company dayroom which corresponds to the living room and the party room at home. He has his baseball diamond and horseshoe court, his camp motion picture theatre, his regimental recreation building, his chapel, his post service club for dances and social assemblies, his library, his guest house for visitors, his post exchange. And in the recreational areas now in use and increasing, he has the occasional longer respite, strictly on his own, with no duty calls.

If you could visit among the men in your Army today, you would find them worthy of your pride, and you would feel that their spirit is your bulwark.

But the Army can do only its part. Tanks, cannon, machine guns, bombers—armament is essential but it is of no avail without spiritual fire in the men; the spiritual fire of the whole people is the final measure of the safety of America. You cannot leave it all to the soldiers. The people must be one with them.

Even as the training program of the Army, including the recreation program, is devoted to the upbuilding of that moral fibre which makes possible complete devotion to duty, it is necessary that the cultural leaders of America devote every power of brain and heart to the cause of bringing about a unity of national spirit. In order to have any security at all in a world that is full of war, this Nation must achieve a spiritual depth and serenity capable of meeting absolutely any physical emergency. Let each mind begin with itself, its own discipline, its own attitude. The next step is the one of personal influence with others, which will be exercised by the sheer force of sincerity.

Religious, social, industrial, political differences there may be, and it is a part of the genius of this Republic that these differences should have freedom to exist—but never to the point of preventing that spiritual unity which will rally every man, woman and child in loyalty to the central purpose of preserving and defending the United States of America.

Water Recreation in TVA

C. M. TERRY, Associate Recreation Technician, Tennessee Valley Authority, Knoxville, Tenn.

THE Tennessee Valley is beautiful. It is endowed with a rich natural heritage of rugged mountains and peaceful valleys, tumbling streams, dense forests, wave after wave of rolling hills topped by crests of flowering shrubs. The region has an equable climate; mild winters, mild summers, glorious springs and autumns.

Yet there was one feature lacking; one feature needed to round out the great recreation potentialities of the region—lakes. While nature had provided the Tennessee Valley region with an abundance of recreation attractions, there were no large natural lakes in the entire region. Fortunately, the creation of the Tennessee Valley Authority by Congress in 1933 has changed that. Instructed to build a series of high dams on the Tennessee river and its tributaries, the TVA has to date created a chain of 8 interconnected lakes, large, deep, and clear. The total water surface of the TVA lakes is 300,000 acres. Their shoreline, nearly every mile in public ownership, is over 6,000 miles long. Currently, 4 additional dams are under construction. The waters impounded by the dams now under construction will increase the total water surface of TVA lakes to more than 600,000 acres.

Three and a half million people enjoyed themselves on one or another of the Tennessee Valley Authority's lakes last year, fishing, swimming, sail and motor boating, watching speed races, hiking, picnicking, horseback riding, and seeing the sights. All up and down the Tennessee Valley from Pickwick Dam to Norris, across all of northern Alabama and a corner of Mississippi, in Eastern Tennessee and Western Tennessee, thousands of persons are getting wholesome, healthful, invigorating recreation on TVA lakes.

The natural advantages of the lakes for outdoors play is a by-product of TVA's work in building dams on the Tennessee River system for the development of navigation and electric power and for the control of floods. Mindful of the possibilities for recreation, the Authority, in collaboration with the National Park Service, has built 2 demonstration parks, Norris and Big Ridge, to stimulate state and local governments to develop parks elsewhere on the lakes. Norris Park, 3,800 acres, adjoining Norris Dam, has 25 vacation cabins, a public lodge, a team room, an outdoor theatre, a trailer or camping area, a swimming beach, two picnic grounds, a riding stable, and wilderness trails for horseback and hiking. Big Ridge Park contains 4,500 acres and is built around a small lake cut off from the main body of Norris Lake by a small concrete dam. The park has a sand beach, a bath house, picnic grounds, vacation cabins, a lodge, and a camp for organized groups of as many as 50 persons.

TVA's example and assistance have encouraged state, county and

municipal governments and private enterprise to join in the development of parks along the lakeshores. On Pickwick Reservoir, a 1,700-acre park is operated by a private enterprise, the Pickwick Company, as lessee from TVA, and a group camp large enough to accommodate 120 persons is operated by an advisory council of Alabama, Mississippi and Tennessee organizations.

On Chickamauga Lake two parks on TVA lands are being developed under the sponsorship of the Tennessee Department of Conservation, which will operate them. The parks are being built by the National Park Service with labor from the CCC. Harrison Bay state park, a 1,400-acre tract 17 miles northeast of Chattanooga, Tennessee, will have a boat harbor with accommodations for 1,000 boats; a five-mile marine race course clearly visible from a site at which a grandstand will be erected on one of the several islands that dot the shore; a large outdoor swimming pool, including a wading pool for children; bath houses, outdoor ovens, picnic tables, cabins, and a public lodge.

Booker T. Washington state park for Negroes is being developed on a 350-acre tract 8 miles from Chattanooga. Swimming, boating, camping and day outings will be among the diversions that will be provided for. The park will serve a concentrated urban population of Negroes otherwise almost entirely without non-urban playgrounds.

At Dayton, Tennessee, the city planning commission is developing a municipal park and boat harbor on TVA property bordering an arm of Chickamauga Lake. At Soddy, Tennessee, the Hamilton County Park Commission has leased 209 acres of the Authority's land and is developing a park where the waters of the lake are skirted by a major federal highway. A portion of the abandoned highway fill and roadbed has been converted into a boat pier. Near Guntersville, Alabama, the Alabama State Park Division is considering establishment of a State park on the lake. Although TVA does not build or operate recreation areas except as demonstrations, it stands ready to help states, counties, cities, plan park developments, and make available land suitable for the purpose.

There are now more than 5,000 pleasure craft on the TVA chain of lakes. They range from home-made rowboats to cabin cruisers 65 feet in length and are estimated to have a total value of approximately $1,000,000. In 1940 on Norris Lake alone there were 2,000 boats, while in 1938 there were only 1,100.

Today there are about 30 boat docks on the TVA lakes. Most of these docks are open the year-round for the rental of boats—with or without motors—for fishing, duck hunting, and cruising. Slips and lockers are rented to boat owners. Many of the boat docks maintain attractive picnic groves on the waterfront. With the exception of two docks operated by the Authority as demonstrations, all boat docks are operated as commercial concessions by residents of the area. Two packer com-

panies, from Cincinnati and St. Louis, run regular cruises up the Tennessee as far as Muscle Shoals. We predict that as the upper reaches of the Tennessee become fully navigable, excursion boats and packets will ply the entire 650 miles of the river.

Fishing is already one of the most popular sports on TVA waters. More than one million three hundred thousand fishermen enjoyed the TVA lakes during 1940. In Alabama, where the lakes have been in existence for several years, more than one-third of all the fishing licenses issued in the entire State were sold in the eight counties bordering the TVA lakes. A hardware dealer in Cornith, Mississippi, reported that he paid the entire cost of his overhead from the sale of fishing tackle at Pickwick Lake. Stores in Knoxville and other places close to Norris Lake report substantial increases in sales of fishing and boating equipment. Impoundment of the river waters has improved fishing, and the TVA lakes abound with small-mouth, large-mouth and Kentucky bass, wall-eye, sauger, crappie and bream. Studies of fish and game are carried on by the Authority in conjunction with the State Conservation Departments of the States, the United States Bureau of Survey. The conversion of a shallow, rapidly flowing river into a series of deep, still lakes has affected animal, fish and plant life. Two fully equipped laboratory boats operated by TVA research staffs are constantly gathering information to be used in maintaining the TVA lake country as good habitat for waterfowl, fish, upland game, fur-bearing animals, and other wildlife.

Reforestation work is performed by the Authority to serve the primary purposes of rebuilding forest resources and preserving erosion of the soil, but it has a salutary effect on the recreation resources also, for some of the most attractive forms of recreation in the valley are of wilderness types. From TVA nurseries more than 110 million tree seedlings have been transplanted to valley lands with the coöperation of the Civilian Conservation Corps and private land-owners.

Shores of the TVA lakes include many attractive sites for cabins and summer cottages, and TVA has reserved more than 650 individual cottage sites on its properties. The Authority has prepared a set of standard designs which may be used by lessees. The summer cottage tracts average slightly over one acre in size, and are leased for 20-year terms at rentals ranging from $15 to $100 a year according to the desirability of the location and the size of the tract. Some of the lots have lake frontage, others have lake scenes through community harbor lots.

Communities throughout the valley have utilized their new water-recreation resources by staging annual events with the coöperation of TVA. At Norris, Tennessee, the custom of an annual fishing rodeo and an annual boat regatta was started in 1937. Fishing rodeos are staged on Wheeler Lake by the Alabama counties of Limestone and Morgan. Boating events, all of them under the auspices of the National Out-

board Association, have been staged at Chattanooga and Pickwick, Tennessee, and Guntersville, Decatur, Florence and Sheffield, Alabama.

Recreation is one of the many facets of TVA which have brought seven million persons from every State in the Union and more than a score of foreign countries to visit the Authority's projects in the past eight years. The most enthusiastic response of all has come from the people of the Valley themselves.

The cottages at TVA's demonstration parks are continuously full during the summer season and usually reservations have to be made several weeks in advance. The Norris Fishing Rodeo has had 500 participants, from nine States. The celebration in June, 1940, marking the completion of Pickwick Dam brought out 40,000 spectators. Guntersville, Alabama, a town of 3,500 population, was swamped by a crowd of 55,000 that turned out for its first regatta in 1939. The avidness of the Negro population for non-urban outdoor playgrounds was demonstrated by the crowds that congregated at Booker T. Washington state park last summer although no facilities were ready for use. Chattanooga, Tennessee, an inland city of less than 150,000 population, was reported by the boat industry to be the most active market for boats in the United States the year after nearby Chickamauga Lake was formed.

In carrying out its program of recreation development, the Tennessee Valley Authority has relied upon the coöperation and the assistance of other agencies—Federal, state, and local. Where the experience of established Federal agencies can contribute to the solution of a given problem, the public interest will be best served by the advice and counsel of those agencies. Through such a program, centered in a single regional agency but embodying the resources and abilities of numerous agencies, the recreation potentialities of the Tennessee river lakes can be developed to their fullest extent for the maximum use and enjoyment of the American people.

Florida Parks and Parkways

LEWIS G. SCOGGIN, Director, State Parks, Florida Forest and Park Service, Tallahassee, Fla.

THE need for preservation of Florida's resources suddenly became evident and those in authority admitted it in 1935 when a telegram was dispatched from the Governor to a committee on conservation March 26, 1935. This telegram called for coöperation with the National administration in its land planning program and requested the committee to coöperate in developing a sound conservation program for Florida.

In the short span of six years the State Park System of Florida has grown in its entirety. The state legislature, meeting in May 1935, passed the law creating the Florida Park Service, which was to operate under

the Florida Board of Forestry. This was an emergency measure to take advantage of the aid offered by the Federal government. Few people in the State at that time knew the meaning of the words—State Parks—not enough of them yet realize their significance.

Thus was laid the foundation upon which the whole structure has been built. It has been slowly but surely strengthened and built up. Without the fortitude and unselfish devotion which has characterized those who have done pioneering in state park work in Florida, our task today would be immeasurably more difficult.

Wisdom was used in the selection of state park sites. They were chosen strictly upon their merits without notice of political and pressure groups. Each and every park site was selected because it represented a typical segment of our natural beauty, and because they were outstanding examples of scenic, historic or scientific interest in their particular section of the State. Difficulty was experienced in acquiring many of the areas due to a lack of adequate funds and for other reasons. The Florida Board of Forestry did not have the right of eminent domain.

The first appropriation for state park purposes was $25,000 for each year of the biennium. These funds were economically used for acquisition, administration and construction. Federal aid in both materials and labor were liberal and made possible the rapid advancement of the building program. Four CCC companies were assigned to state parks in Florida during the year 1935. This represented a Federal expenditure of about $800,000 annually compared to our State appropriation of $25,000.

Early development and expansion brought on the usual troubles. Almost everybody's ideas of state park facilities and their disposition upon the area have since undergone tremendous changes. The wisdom of completing acquisition before development has begun has been demonstrated over and over again.

Today we have five parks in operation, but in three of them CCC camps are still working. In addition to those we have two other parks under development by CCC which have not been officially opened.

CCC participation and the coöperation extended by the National Park Service has actually been the lifeblood of Florida's state parks. There have been times when we have cursed them for seemingly unnecessary delays and useless red tape, but they say "True love never runs smoothly." In spite of our apparent restlessness and lack of appreciation of the finer things, there is in the heart of every one of us a feeling of deep gratitude for what has been done for our State by these two splendid organizations. We know that without them state park development in Florida would have been delayed a decade.

Highlands Hammock is the oldest park in our system, and it has a national reputation. We believe that its function is to serve as the center for interpretation of nature activities. The winter series of cultural programs here last winter was successful, and we are told that it was

the only series of its kind in the country. Picnicking, nature study, fishing and swimming rank in the order named.

Hillsborough River State Park was the second to be opened and it is principally a recreation center for the large population spreading around Tampa Bay. Attendance here increased 72 percent during the past year.

Gold Head Branch, the third unit to be opened, is a scenic spot that is popular as a vacation center. With the tempo of military preparedness quickened and large troop concentrations nearby, this park must become an important unit in the national plan to furnish the military adequate recreation. Citizen and soldier alike enjoy the facilities offered here. Swimming, fishing, picnicking, vacation cottages and nature activities provide a variety to suit the taste of any person seeking recreation.

Fort Clinch is next in point of service, and this park is steeped in history. Historians tell us that the white man's activity on Amelia Island started May 3, 1562, when the expedition of Jean Ribault sailed along its shore and included it in French claims in North America. Since that time the Spanish, the English, pirates and Americans have fought over the area and have successively occupied it. The museum, which we now have open, shall be the means of interpreting the history of this area to the people who visit the park. In addition to historical interest Fort Clinch State Park possesses a combination of rare natural beauty and the charm of antiquity. Since the museum has been opened attendance has shown a steady increase.

Myakka River State Park is unusual because of its wildlife, and it is our largest park. Everything in this park is carved on the grand scale. The distances across the flood plains are magnificent and the size of flocks of waterfowl is almost unbelievable. This park shall be made the center of our interpretation of wildlife activities and their value to conservation. In addition to being a scenic and wildlife area, Myakka possesses other features which make it popular, especially fishing, picnicking and camping during the winter season.

The department recently published a booklet picturing and briefly describing the various State Parks and it has aroused state-wide interest. Numerous editorials have resulted from its release, and there has been a perceptible increase in the demand for information concerning our state parks. The most gratifying reaction to this publication has been the sentiment created among the legislators for increased support for state parks. We face the very pleasant prospect of starting a new fiscal year, July 1, with an increased appropriation for state parks. This is heartening in the face of the threat that CCC assistance will be withdrawn in favor of National Defense projects. If the CCC work is continued it means that we shall have additional funds with which to purchase materials and thereby speed the progress in the parks which are now under development.

The Florida Park, Parkway and Recreational Area Study has been

completed and we propose to follow the recommendations in this report during development of our parks and for our acquisition. We have recently opened negotiations for a beach park on the lower East Coast, a beach park on the lower West Coast and a park in the lake country near the population center at Orlando. It is too early to report complete success in this effort, but we are very much encouraged with the results thus far obtained.

We have a plan progressively to improve our administrative organization and to add to our field force men capable of conducting interpretive programs. We have recently had an expression of the willingness of educational leaders to join us in promoting and executing programs and studying ways to provide better trained personnel for parks. A meeting was called at the University of Tampa, with representatives from every state section, and a spirit of helpfulness and coöperation was evident. With the coöperation of this unselfish group, state parks in Florida are sure of a successful future.

The future of state parks in Florida appears to be very bright. If we succeed in strengthening our organizations and if we realize our ambitions for an adequate acquisition program, Florida state parks will be able to assume a position of leadership in the Southeast. It is natural to expect state parks in Florida because all of the essentials for this kind of recreation are there.

Our legislative program, to strengthen the State Park Service, has received favorable attention in the legislature now nearing adjournment, and it seems likely that we have passed through our most difficult period. From now on the problem of educating the public to the needs of state parks will not be so difficult. We have many ardent friends who will tell the story to the people back home and thus relieve the Service of a tremendous burden which it has been trying hard to carry during a time when every effort was being made to assist in the practical solution of construction problems. We propose to inaugurate interpretive programs in all of our parks and emphasize those values which make each park an outstanding unit of the system. We realize the importance of preserving every fundamental value and not allowing outside interests to destroy the one thing that makes each park outstanding.

State parks in Florida have not been designed to make money; they have been designed to give something to the people of Florida, and to our guests, that money cannot buy.

Some of our visitors from outside the State tell us that we do not realize our possibilities, and that it is high time that we got awake to the fact that the best crop that Florida has is its tourist crop. Our ambition is to provide in Florida state parks genuine southern hospitality and preserve samples of our unspoiled natural scenery to delight everyone who visits them.

Iowa State Parks

MRS. ADDISON PARKER, member, Iowa State Conservation Commission, Des Moines, Iowa

ACCOMPLISHMENTS and problems are conditioned, first, by all the social and economic factors which go to make up the State. Iowa's less than one hundred years of statehood have witnessed the breaking up of the prairie, the clearing of the forest, the draining of the lakes, the straightening of the rivers, the trek of the covered wagon, the inroad of the long straight lanes of the Iron Horse, to be succeeded in our own era by the great whirring wings of giant ships of the air.

For 500 million years, so scientists tell us, this great fertile area between two majestic rivers has been in the process of formation. In less than 200 years its natural beauty has been so despoiled that it will take many, many years to restore it. Settlement, and development, and exploitation! "O, pioneers" what devastation was committed in thy name!

Since 1919, in a little over a fifth of our State's lifetime, we have been attempting by organized effort to heal some of the scars. At that date a Board of Conservation was established, to be followed later by a Conservation Commission, which was a consolidation of the State Fish and Game Department and the Board of Conservation.

Foremost among the State's great conservationists is our dearly loved Jay Darling, whose efforts gave impetus to Iowa's most important conservation achievement—the establishment of our Twenty-five Year Plan.

By means of a generous legislative appropriation, a survey of the State was made by specialists in every field—water, forests, prairie, soil, wildlife, geology, archæology, and history—as the first step in the preparation of a coördinated program for future conservation development. The recommendations of this plan have been followed in the acquisition of nearly 20,000 acres of land for park purposes, in 72 park and recreational areas.

In the early 30's when the CCC Camps were established the Twenty-five Year Plan was so greatly accelerated that much more has been accomplished in a short space of time than was envisioned in the survey. In stepping up the Program, we have probably made some blunders, but to use an outworn phrase, the people of the state have become "park-minded." Their demands for parks, lakes, dredging, river improvement, and historical monuments, are far beyond the possibility of present achievement.

Most persons who do not know Iowa think of it as a prairie State. When the first settlers came into the region about 20 percent of the state was forested. They cleared the forests to make land for crops. In the boom days of $2.00 wheat much more of this land was denuded of

its timber and plowed. With falling prices neither crops nor timber was returned to the soil, so that throughout the State we have had a great problem of erosion control. In the Southwest part of the State, where the great winds of the western plains carried and deposited the fine particles of clay, are the rugged loess bluffs of the Missouri. In some places the deposit of loess is three hundred feet in depth.

Here the State has a Park of 700 acres, where the vegetation of the north and the south converge. The northern slopes are covered with the same plants, shrubs and trees of our northern parks, while on the southern slopes are found the paw-paw, stately yucca and many other plants indigenous to the south.

Adjacent to this Park the U. S. Soil Conservation Service has given an outstanding example of erosion control in an area which appeared to be ready to succumb to the desert. Terracing, control plowing, gully planting, windbreaks, reforestation have changed the face of the land, and again it blossoms as a garden.

In coöperation with Iowa State College, the Conservation Commission has administered a Federal and State Nursery, to furnish game cover planting material, trees for erosion control, reforestation, and participation in the Clarke-McNary program and the Norris-Doxie measure. The past year two million trees were planted, mostly on our own park areas.

Last winter, during the legislative session the nurserymen of the State combined in a very strong lobby to attempt to do away with the state nursery, claiming it interfered with private business. Because their amendment was attached to the Conservation Commission's appropriation, a compromise was imperative. Finally the reforestation clause was withdrawn from the original measure, but the nurserymen threatened that they would return in two years to demand more drastic restrictions of our nursery program.

The Twenty-five Year Plan said that "Iowa's woodlands constitute the State's most urgent item for conservation." Therefore, we have been gratified to have the Federal government purchase forest land in the State as state preserves.

The State is now acquiring in northeast Iowa, sometimes called the "Little Switzerland of America," about 1000 acres to be turned over to the Federal government as a National Monument. This tract embraces many pre-historic Indian mounds, including it is said, the best examples of effigy mounds in America.

Another historic project in process of restoration is that of Fort Atkinson, the only Federal fort built to protect the friendly Indians against the warring tribes. Our first step in this project was research. We sent a historian, familiar with the history of the Fort, to Washington to search the old Army records for information. A plat of the original fort was found, and excavations are now being made which will eventu-

ally indicate the original building sites and stockades. This restoration will not be done at once, but will extend over a period of years.

A project which has long been hopefully contemplated is the acquisition of a large area of native prairie. Recently we have begun a survey of the State, attempting to locate, if possible, some particularly large tracts of land in various parts of the state unplowed and unpastured. There is little left and our findings are not encouraging. You may recall Willa Cather's description of the western prairie. She wrote, "As I looked about me I felt that the grass was the country, as the water is the sea. The red of the grass made all the great prairie the color of wine stains or of certain seaweeds when they are first washed up; and there was so much motion in it; the whole country seemed somehow to be running."

In our park program, we are again indebted to the wisdom and foresight of the early planners, who acquired areas outstanding in character and great beauty. Forest areas, great caves, high bluffs with majestic views, clear lakes, and bubbling streams add variety and interest to the park program.

Iowa's population of two and a half million is "truly rural." We have no large cities, no great urban centers of industry.

In the short space of ten years Iowa jumped to the fourth ranking State in the country in paving mileage, surpassed only by New York, Illinois and Pennsylvania. Thus everybody in Iowa can now and does drive to our state parks. Three and a half million people use the parks annually. I might add that Iowa does not charge an admission fee.

When the Board of Conservation was formed, it chose as Superintendent of Parks an engineer from the Highway Department, familiar with every corner of the State, and naturally sympathetic to a broad Conservation Program. When the consolidation took place, Murray Hutton quite logically succeeded to the Directorship of the new Commission. His expert training, his infallible memory for details, his clear vision, high moral integrity and fine capacity for leadership endeared him to all who were privileged to work with him. Therefore when his sudden death occurred, it was a distinct loss to Iowa's Park and Conservation Program.

Iowa has had a "Public Relations" department for some time and for the past two years has had a weekly broadcast. When the Armistice Day blizzard struck suddenly at the beginning of the hunting season, warnings to hunters were sent out immediately over the radio. They were importuned to cease hunting and to go out with food to rescue the pheasants, if possible. As a result we now have the largest pheasant crop that we have had in years.

News distributed formally through our Bulletin now goes out in spot-news releases. This method is bringing excellent results and 100 percent coöperation from the newspapers.

In the new park booklet which we are publishing soon, we are incorporating the National Park Service's classification for parks, and other preserves. This will automatically eliminate the area of only a few acres from designation as a state park.

Our greatest need is more water recreation. In areas where the lowered water table has become a serious economic problem, our made lakes have served frequently to augment the water supply of nearby towns. So they do double duty.

New conditions bring new problems.

In our park program and development one is reminded of Aldo Leopold's definition of conservation:

> Conservation is a bird which flies faster than the shot we aim at it. . . . The job we aspired to perform with a dozen volunteers is now baffling a hundred professionals. The job we thought would take five years will barely be started in fifty. Our target then, is a receding one. The task grows greater year by year, but so does its importance. We begin by seeking a few trees or birds; to get them we must build a new relationship between men and land.

Reservation or Scenic Areas

DR. LAURIE D. COX, Professor of Landscape and Recreational Management, New York State College of Forestry, Syracuse, N. Y.

PARK areas of the reservation or scenic type form one of the more variable groups of park area with respect to both character of development and maintenance costs, and yet parks of this type are now one of the easiest groups in which to establish maintenance cost standards. The variation is due to the great difference between such areas with respect to size, development, and amount and kind of public use. Such areas range from forests or scenic preserves with little or no development on the one hand to highly developed state parks and county or metropolitan reserves on the other.

To arrive at any basis of comparison for maintenance standards it is necessary to effect a definite classification of the areas into groups of similar kind as regards development and use, just as is the case with older and more familiar forms of park area such as our own highly developed urban parks.

For the purpose of this study we will divide parks of the reservation or scenic type into three general classes. These are as follows:

I. Scenic (aesthetic, historic, or scientific) preserves with natural vegetation (normally forest cover) and with little or no development for recreational use.

II. Scenic areas provided with those simple forms of recreational development as are normally found in wild areas. These would consist of foot trails, simple picnic grounds and camping areas, and the necessary service features such as entrance roads, parking areas, and inexpensive

sanitary facilities. Water recreation of a very simple type might also occur in areas of this class.

III. Regional state parks or county and metropolitan reservations provided not only with the forms of recreation development found in Class II areas as above but with more extensive and more highly organized forms of recreational facilities. These would include elaborate development of water recreation in the form of swimming, boating, and canoeing; numerous well-serviced picnic areas; special game areas; well-developed tourist camps and cabin colonies; restaurants and refreshment stands and even in some cases, hotels.

The relative maintenance costs of each of these three classes will be considered separately.

Class I. In the first class we will not, of course, include large areas of forest land maintained for purely forest purposes even if some recreational use occurs. What is meant is moderate-sized areas existing solely as scenic (aesthetic, historical or scientific) reservations and with little or no recreational use. The maintenance of areas of this type would be limited normally to policing against serious trespass together with fire protection of the forest cover. Such maintenance might vary from nothing to several dollars per acre, depending largely upon the size of the tract. For areas of moderate size (300 to 1,000 acres) a maintenance force for this minimum type of maintenance could be supplied during the summer season by a single caretaker, fireguard or ranger, the expense of which will normally not exceed $100 per month for a four to six month season in the region of our study.

Such maintenance would normally be supplemented by partial oversight during the winter months, and this may be most economically furnished by a local inhabitant living in the general region of the area's location. In case of light recreational use, one or more seasonable employees plus some form of motor transportation would be necessary.

The total annual maintenance expense for this type of maintenance might thus range somewhere from $600 to $1,000 to $2,000 a year. Since areas of this type would not normally be less than 300 to 500 acres in size nor, on the other hand, would they be likely to exceed 1,000 to 1,500 acres as the upper limit, the range of annual maintenance cost could thus be from $1.00 or less to $3.00 or $4.00 an acre, depending primarily upon the acreage of the area. A reasonable range would appear to be from $1.00 to $4.00 per acre with an efficient cost for the normal area (of from 500 to 1,000 acres) of approximately $2.00 or $3.00 per acre. These figures would permit, in the case of areas of 1,000 acres or more, of light recreational use in the forms of foot trails and simple picnic facilities.

Class II. Areas of the second class form the normal or average kind of park area of the reservation type. Such parks will usually range in size from 500 to 2,000 acres. Such parks generally require a year-round

superintendent or permanent caretaker, though if extreme economy is necessary they may be justified in having a seasonal caretaker and partial winter policing, as is the case of Class I above.

There will be required in addition a small staff of seasonal employees together with some form of motor transportation and greater or less annual expense for repairs to roads, parking areas, picnic facilities and buildings.

Assuming an average park of this class with an area of 1,000 to 1,500 acres and with a reasonable economical road system and designed with definitely located use areas, a normal reasonable annual budget for such an area would be as follows:

	Minimum	Maximum
Supervisor	$600	$1,800
Seasonal Laborers, 2 to 8 at 4 months	800	3,200
Motor transportation (annual cost)	400	600
Annual repairs to buildings and facilities	500	1,000
Annual repairs to road surfaces and parking areas	300	1,400
Supplies and miscellaneous	200	500
Total	$2,800	$8,500

Such a budget will thus give an annual cost per acre depending upon size of area from $3.00 to $17.00 a reasonable average being $6.00 to $8.00. Parks of this character and type of development will normally not draw visitors in large numbers from a greater radius than 10 to 15 miles unless the scenery is of quite unusual character. An examination of areas of this type in various sections of the country show that the annual use for such parks will vary from 20,000 or less to 80,000 or more, depending largely upon the population in the area served.

On the basis of per visitor or per person day cost, such parks might thus show a range of from $.03 to $.40 depending upon annual number of visitors and amount of annual budget. A reasonable and efficient average per visitor cost would appear to lie between $.114 and $.20 in which ranges the existing per person day use costs for good sized areas of this class which are well maintained and well used are found to lie.

In most state parks today revenues of various forms are secured, the most common as well as the most important ones being either the individual admission or car parking charges. In parks of this class II type few, if any, other sources of revenue would be available except those from refreshment concessions and camp rental. In parks of the reservation types revenue from concessions will seldom, if ever, return a very important amount. On the basis of an individual admission charge, which is commonly $.10 per person, parks of this class would be approximately self-supporting with the maximum of use. On the basis of the car parking fee, the per person revenue is considerably less than $.10. This car parking fee is normally $.25 and experience shows that cars average between 3.5 and 4.5 persons per car, giving a per person revenue between $.05 and $.06. It is probable that parks of

this second class cannot normally be expected to be more than 50 percent to 75 percent self-sustaining even with efficient maintenance and reasonably heavy use, unless the more favorable revenue conditions of personal admission are used.

Class III. Reservations or scenic areas of this class are seen in the highly developed state parks which form perhaps the most typical examples of public park development of the present motor age.

Parks of this class will generally be much the same in size and scenic character as Class II areas just discussed, but the upper limits of size may tend towards higher figures. Parks of this type are characterized by the same extensive areas of wildlife forest cover as Class II areas but with more numerous and more highly organized forms of recreational facility. The distinguishing characteristics of the development of such Class III areas are normally heavily used swimming and other water recreation facilities, extensive and highly serviced picnic areas together with more or less elaborate camp grounds and cabin grounds. Usually such parks also supply extensive facilities for games, bridle paths, winter sports, nature trail and museums and normally maintain high grade refectories or restaurants and, in some cases, hotels.

The increase in maintenance cost over reservations of the Class II type is due primarily to a higher quality of supervision, larger forces of seasonal employees, much greater areas in roads and parking areas, and increased costs for all forms of maintenance and repairs to facilities and buildings.

Below there is given an actual budget for an existing park of this class. This park is of considerable size, carefully designed and highly developed, and with what is probably as extensive recreational facilities as are to be found in a park of this class in the country. These figures are for the 1939 budget for this park.

Supervision	$3,700
Policing	2,500
General Labor	7,900
Materials and Supplies	3,650
Service (gas, fuel, etc.)	635
Miscellaneous	900
Total	$19,285

The exact area of this park is 928 acres, so that the per acre cost is $20.78. This would seem to represent a maximum per acre cost on the basis of high development and efficient maintenance for parks of this type if of reasonably large area. For areas of the reservation type, however, per acre costs are not a particularly satisfactory method of maintenance cost comparison since considerable variations in acreage can occur without corresponding variation in total costs. A much more satisfactory method of maintenance comparison is the per visitor or per person day use cost.

The number of annual visitors to this park in 1939 was 171,000, so

that the per visitor or per person day use cost of maintenance was slightly in excess of $.11. It is interesting to see that a high degree of development in reservations of this type attract relatively large numbers of people. In this case, visitors were drawn regularly from distances of from 12 to 30 miles to give a large annual use, although the total population within this radius was not extremely large. In this case the per person day use cost was (due to heavy use) well below the average per person cost for Class II areas, although per acre costs were greater than that of the upper figures for Class II areas.

The total revenue for this park for the same year, 1939, was $15.145 so that the per person day use revenue returned to the park was between $.08 and $.09. The park area was thus approximately 80 percent self-sustaining. This particular park functioned on the car parking charge rather than the admission charge so that the revenue from car parking represented $.05 to $.06 per person and miscellaneous revenue approximately $.03. Had this park operated on the $.10 admission charge and had the other revenues remained the same, as they probably would have, it is evident that this park would have returned a revenue in excess of maintenance costs.

Another example may be taken of a state park operating under different conditions with respect to climate and surrounding population, but similar in character as regards topography, forest cover, quality of design, and type of developments. This park is about four times as large as the park already discussed although the area of active development is no larger. The number of different types of recreation facilities provided is somewhat less, 10 types as against 15. The 1939 budget of this park was as follows:

Supervision	$3,700
Labor	2,100
Materials and Supplies	1,250
Service (fuel, gas, electricity, etc.)	1,350
Repairs and Miscellaneous	2,600
Total	$11,058

The number of visitors to the park in 1939 was 115,000, and the size of the area 3,887 acres. Thus the per acre cost of maintenance was $3.47 as against $20.78 for the other park. The per person day use cost, however, was very similar, being approximately $.10. The revenue returned by this park for 1939 was $13,500 or approximately $.12 per person so that the park was fully self-maintaining and returned a profit above operation and maintenance. This park operates on the personal admission basis.

From an examination of a considerable number of park areas of this general Class III type, it is apparent that areas developed on this character which have a reasonably large population within a radius of 20 to 35 miles may be readily maintained for approximately $.10 or

$.11 per visitor or per person day use, which may be in large or whole part recovered by revenue if proper revenue-producing policies are followed.

In the accompanying table (No. 1) will be found a brief analysis of maintenance costs for parks of the reservation or scenic type with indicated reasonable averages with respect to per acre and per visitor costs. As stated above, per acre costs cannot safely be taken as a criterion except for areas within a comparative narrow range with respect to size in any particular class. For parks of the character with respect to development and amount of public use, if the areas are small per acre maintenance costs will be high, while if the areas are large per acre costs will be low, the actual maintenance costs being very little affected by total acreage.

For park areas of both Class II and Class III reservations, per visitor or per person day use costs furnish a more accurate basis of comparison, and parks which are similar in character, development, amount of use and standards of maintenance will show variations within extremely narrow limits.

TABLE No. 1

RESERVATIONS OR SCENIC AREAS—MAINTENANCE COSTS

Class of Area	Range of Area in Acres	Efficient Area	Annual Maintenance Costs	Normal Range Cost Per Acre	Reasonable Cost per Acre	Normal Range Annual Visitor	Range of Cost per Visitor	Efficient Cost per Visitor	Range of Revenue per Visitor	Reasonable Revenue per Visitor
Class I	300 to 1,500	500 to 1,000	$600 to $2,000	$1–4	$2–3	—	—	—	—	—
Class II	500 to 2,000	1,000 to 2,000	$2,800 to $8,500	$3–17	$6–8	20,000 to 80,000	$.03–.40	$.11–.20	$.05–.13	$.07–.10
Class III	500 to 5,000	1,000 to 2,000	$5,000 to $20,000	$3–25	$15–20	75,000 to 300,000	$.09–.30	$.11–.13	$.05–.22	$.09–.13

Opportunities for Young Technicians in State Park Work

PROFESSOR OTTO G. SCHAFFER, Department of Landscape Architecture, University of Illinois, Urbana, Ill.

AMONG the many fine achievements of the National Conference on State Parks, one of the finest is its coöperative attitude toward the various persons and agencies engaged in promoting, planning, developing and maintaining State Parks. The Conference has been especially foresighted in recognizing among the agencies thus engaged the several schools who are responsible for the training of young men who are to become the future State Park technicians and administrators. I speak as a representative of one of the Schools which, as you have recognized, are becoming important agencies in promoting State Park work and in training young men for it.

Before 1933 there was relatively little activity in State Park work. In spite of the fact that some States had had such parks for many years, very few States had a well-developed program. Because of this fact there was little demand for technicians and, therefore, practically no interest in the field as a career.

The professions most directly interested in Park work found small demand for their services and that demand was largely in the field of City Parks. Naturally the Schools training future practitioners for those Professions confined such instruction as they offered in Park work to City Parks and Playgrounds.

When the program of State Parks and Recreation was expanded early in 1933, the Professions found themselves unprepared to meet the demand for trained technicians and had to adjust themselves as well as they could. Many of the Schools of Landscape Architecture, which until that time had followed the traditional pattern of training students for the field of domestic practice, realized the opportunity offered by the State Park field and began to adjust their teaching programs to fit their students for the work and to call the attention of students to the new opportunities. Among these Schools was the University of Illinois.

Believing that a teacher should know his subject from first-hand observation and study, I have for many years been using my summer vacation for such study. When the CCC program was set up, I concentrated my attention on Parks and have had the pleasure of visiting parks in nearly all of the States and of talking with many persons engaged in one or another of the numerous phases of State Park work.

One of the not too surprising results of these talks was the discovery that there were very few persons available who had the training required for this very exacting work. Many of the landscape architects had found, to their surprise, that their former experience with individual clients in the domestic field could not be directly translated into

the field of Park Planning. Many looked upon their employment as temporary and thought of the program as being merely an emergency one. Others became interested in the program and made serious and successful efforts to master its special requirements. When one looks back upon those early, hectic days of rapid, tremendous expansion the wonder is not that mistakes were made but that so much fine, constructive and lasting work was accomplished. I need not tell this audience how the miracle was performed; many here today were among the miracle workers.

As the work progressed from year to year many of the older men returned to their former activities, or to other activities, and their places were filled by young men, many just out of our colleges. It is with these younger men and with other young men still to come that this talk is primarily concerned.

A *state park technician*, to be rated "good," must be more than a specialist in some one field of Park knowledge. He must know one or more fields thoroughly but he must also know something about all of the other fields and above all else he must be able and willing to subordinate his own field and to collaborate and coöperate with men in other fields. Thus far, our highly individualistic society has not been too successful in producing such persons, either in or out of the academic environment.

The young men who have entered the State Park field during the past few years have had a marvelous opportunity to develop a correct attitude toward collaboration. They have had to work with all sorts of people—laymen, politicians, and technicians; they have had to adjust their thinking and planning to new conditions and new objectives. That they are learning how to do these things well is abundantly evidenced by the many fine recent examples of State Park developments.

Whereas eight years ago, at the beginning of the CCC program, we had a very few trained park technicians available, today, as a result of the experience gained from the program, we have a large number. Many of them are young men, men with an excellent background of professional education, with an equally excellent background of field experience and with a sincere respect for and belief in State Park work as a worthwhile career.

What opportunities do these young men look for in State Park work? First of all a chance to express themselves, in terms of their profession and to develop, to the fullest extent of their abilities, the talents they have and the knowledge they have acquired. They are conscious of their lack of practical experience and are anxious to obtain the widest possible range of high quality experience. They wish to be assured that their ability, when demonstrated by conscientious, good quality work, will be recognized and rewarded. They look for reasonable security in their employment so that the policies and programs they have helped to

formulate may be carried on by them to a successful conclusion and so that they may be encouraged to believe that State Park work *is* a worthwhile career.

How far do present State Park programs go in providing these opportunities? It is difficult to evaluate this question. Several States have had a program for many years; others have entered upon their program recently. It is, however, apparent that the best opportunities are not always confined to the States with the longest established programs. The reasons for this are numerous and are well known to most of you. Perhaps the outstanding reason is the failure of the public fully to appreciate and adequately to support the program. No other project within the control of the average citizen can accomplish more good for more people than will result from vigorous, persistent and intelligent support of a State Park program. It is a discouraging fact that the majority of the citizens who have the most to gain from an adequately conceived, capably developed and properly maintained program are the slowest to realize its values. Up to the present time practically all of our progress in State Park work is due to the unselfish, untiring activities of a few interested persons and of organizations such as this Conference.

A frequently voiced criticism of public work is that it is more costly and less efficient than similar work done by private enterprise. Without arguing the validity of the criticism and assuming that in some cases it is true, one might attempt to analyze the causes which produce the effect. Important among these causes have been failure to pay salaries and to provide working conditions comparable to those in private enterprise and those causes which we customarily lump together under the covering term of "politics."

Even before the advent of the present emergency it was becoming increasingly clear that government was big business, bigger than many big businesses in private enterprise. This trend will no doubt continue and we may expect government to take over even more of the activities once thought to be the sole prerogative of private enterprise. State Parks are big business.

Big business has always demanded and usually obtained the best of everything. If government is to succeed in the field of big business it, too, must demand and obtain the best of everything and must expect to pay prices comparable to those paid by private enterprise. Failure to do this will inevitably result in breakdowns. As a people we cannot afford such breakdowns. Sooner or later low salaries and unfavorable working conditions will result in incompetent personnel and in incompetent workmanship and that means unnecessary and wasteful taxation.

For our own sake we must provide the best possible environment for our State Park personnel. They must have as much security of employment as is consistent with high-class performance, they must be paid adequate salaries, they must be given freedom to express themselves

professionally, they must be shown that State Park work offers as many, if not more, opportunities for a satisfying career as does employment in private enterprise. If we do these things our problem is solved; if we fail to do them we undermine the morale of our technicians and that is our loss.

I hesitate to discuss the disadvantages set up under the term politics. Perhaps there is no need for me to try. The conference meeting for this year was affected by politics in one form. Perhaps the major change we should expect from politicians is to have them recognize the importance of the statements made above; to ask that they be the masters without being bosses. When our young men know that what is given without merit may be taken away without cause they are not encouraged to give us their best efforts.

One of the most significant experiences of my twenty-one years of teaching is the growing sense of responsibility which young men are developing toward public service. When everyone concerned in this important field of Park work fully realizes the significance of this trend and does his best to encourage it, we shall be on safe ground in assuring our young men that there are real, worthwhile opportunities for them in State Park work.

The Need for Young Technicians in State Parks

PROFESSOR P. H. ELWOOD, Head, Department of Landscape Architecture, Iowa State College, Ames, Iowa

DURING the past eight years the standards of state park design have been advanced remarkably. This has to a large extent been due to the fine work of trained and experienced planners and technicians brought into this field.

The leadership and guidance of the National Park Service in bringing this about should be commended. These able technicians on the other hand have meant much to the National Park Service itself and when one compares the type of quality of design in the National and State Parks of a decade ago with that of today the contrast is startling. Therefore, for the future it is hoped the lessons of the past will be remembered and acted upon with vision and intelligence.

Overseas we are seeing what skilled technicians and planners can do in a destructive way. Even though trained men will be scarce during the immediate years ahead, there should be no substitution for skill and high ideals and technical ability in state park and recreational planning and construction.

We must be on guard and be watchful lest under the guise of defense the integrity of our state and national parks will be threatened. Already definite attempts are being made to break down use restrictions and allow commercial and other vitiating activities in our great na-

tional recreational areas. We can and must use and keep these parks so as best to serve the physical and spiritual well-being of the youth of today whether in civilian or military service. Neither should we for a moment overlook the accruing benefits to future generations.

The young men going into this important work from the schools should be stirred and motivated by a burning desire to be of fine service in a great and noble work. They must realize that it is just as important to plan and build and preserve our great recreational and scenic and historic resources as it is to engage in military service.

The second important factor in equipping these men is instilling into their minds a wholesome respect for and a thorough understanding of the work of their fellow technicians. This if accomplished early in the training period would do much not only to avoid misunderstanding and wasteful rivalry, but would raise the standards and quality of work accomplished.

A well conceived park organization can be likened to an army. The first need is for a general staff or a planning unit with all techniques represented. In a state park you need landscape architects, architects and civil engineers on the general staff as well as administrators. In the executive branch also there should be no *verboten* signs barring able executives even though they may be well trained technicians. Give these men a chance for advancement, some of them may possess real executive ability as well as artistic taste and creative imagination.

Many examples of fine executives from among the best trained technicians are now found in the National Park Service and in many state parks. There should be more of them. Furthermore, there could be cited many outstanding examples of understanding collaboration among the various technicians in the National and State Parks. But these are but a beginning of the great collaborative park enterprises of the future. Park techniques have changed and are changing, demanding greater concentration of effort by all.

Who knows now what the future recreational resources and program for this Nation and hemisphere are to be? Let us make no piecemeal plans or shortsighted ones, but let us be ready with a great master plan for recreation by all units of government, local, state and national, and by all professional techniques each one doing his bit toward the creation of the great picture.

It is up to the schools to train and to inspire, but it is also up to you park men to give further guidance and training to round out these men into skillful park designers, builders, and may I add, executives.

COUNTY PLANNING

County Boards of Agriculture

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COUNTY Land Use Planning Committees, or County Boards of Agriculture as we know them in Virginia, may rightfully be designated as the outposts of democracy. At this time when the practice of democracy is on trial for its life it is important that we counsel together concerning the maintenance, strengthening and use of these county and community committees of farm men and women which reach right down into the intimate life situations of the most remote and insignificant rural neighborhoods. Not since the early New England town meetings have we had a program so well adapted to the practice of genuine democracy as we now have in the land-use planning process.

In the rural field the multiplication of agencies and specialized services was expressed in the creation of the AAA, the Soil Conservation Service, the Farm Security Administration, the REA, the Farm Credit Administration, the TVA, and other similar and related programs. It was well enough to have these agencies. They were created to satisfy unmet needs. It is well that they were set up almost entirely independent of each other. Each needed a chance to find the best means of performing the function for which it was created without being hamstrung by preconceived ideas and fixed administrative policies. It is only fair to say that each new agency did naturally turn to and place great dependence on the long and well established Agricultural Extension Service with its widespread system of county farm and home agents and its thousands of well developed men and women leaders throughout the country.

But this course of completely independent action could not continue indefinitely. All agencies had a tendency to turn to the same more capable and outstanding leaders to serve on their independent administrative committees until these men often met with from three to five different executive committees in a single week. There was also a strong tendency for the different agencies to find the same families good coöperators and demonstrators. Occasional complaints were made that five or six representatives of different agencies called on some especially good farm demonstrator and his family in a single day.

Stated briefly and pointedly the big reason for the establishment of county boards of agriculture and the program planning process was the fact that when the work of all agencies was put together we still had only a fragmentary and inadequate agricultural program and the needs of a large proportion of farm families were not being met.

Some method had to be found to spread the leadership base; reach a larger proportion of the people; carry more information to farm people,

develop and crystalize their judgments and bring them more directly into the determination and execution of programs; to correlate the work of all agencies and to formulate a general agricultural program based on facts about existing conditions and designed to meet the needs of all the typical farm and family situations in the county.

And so the apparent drift away from democracy led inevitably back to this democratic process which now extends into 47 States and more than 1600 counties. It is estimated that 17,000 county, state and regional employees of public agricultural agencies and over 90,000 farm men and women are participating in program planning activities in leadership capacities. The farm families affected by the resulting changes and developments in programs run well into the millions. Farm people are now having the most direct and active part in determining what programs shall be, and how they shall be administered, of any time since the government provided substantial assistance to agriculture.

The work in a Virginia county is started in a meeting of the professional employees of all agricultural agencies working in the county, to explain the purpose and procedure in land-use planning. Arrangements are then made to prepare a community-neighborhood map of the county. This map provides the geographic basis for the selection of neighborhood representatives which constitute the community agricultural committees. On the basis of experience in Virginia it has been found expedient to subdivide communities with more than ten or twelve neighborhoods and to subdivide neighborhoods with more than forty to fifty families. These maps are prepared by program planning field men in coöperation with all professional agricultural workers in the county and in personal conference with large numbers of farm people, storekeepers, teachers, ministers and others throughout the county.

The county board of agriculture is organized with a man and woman chairman in each community and a man and woman committee member in each neighborhood. The members and chairmen in each community constitute the community agricultural committee. The chairmen from all communities, along with the professional workers and a few members-at-large, constitute the executive committee of the county board and all community committees together make up the entire membership of the county board. The frequent meetings of professional workers necessitated by the program are referred to as professional workers' conferences. They meet regularly each month, the executive committee meets quarterly, and the community committees meet quarterly immediately after the executive committee meetings. With a committee man and woman for every small neighborhood area of twenty-five to forty families and with these committee members grouped under the leadership of community committee chairmen we have the most complete organization of farm people that we have ever had in America.

The first work done by each community committee is to prepare a

complete list of all families in each neighborhood. These are numbered by neighborhoods and located on a map provided for this purpose. With the communities and neighborhoods also numbered, it is possible to locate geographically any family in the county in less than a minute. Copies of this map are available to all agricultural agencies and to each committee member. They are quite valuable in all later planning work.

The next basic but preliminary work done by the board is to make a reconnaissant social-and-economic, crop-and-livestock survey of each farm and family. This is done by neighborhoods, and with each man and woman committee member having only twenty-five to forty families it is not too difficult a job. This survey, along with the land-use map which is prepared next, provides the factual basis upon which subsequent planning and work are based. The committee members take a keen interest in both the survey and the land-use mapping, provided they can complete each job quickly and not let it drag out and become boresome.

The results of both the mapping and the survey are often quite surprising. Men in some counties can scarcely believe that three-fourths the county area is woodland and yet there it is, as shown by the aërial photographs, and not subject to question. Similar surprise is often found in the proportion of the open land which the farmers themselves classify as unprofitable for agricultural use. There are still greater surprises in the facts about the people, their homes, their livestock and their cropping practices.

In the Bluestone Community of Mecklenburg County thirty percent of the families were colored; there were twice as many boys as girls in the community, between the ages of eighteen to twenty-three years; approximately half the familes had less than $300 to spend for family living each year; many of the low-income families were producing little food, ten percent had no cow, eleven percent no pigs, six percent no chickens, and seven percent had no gardens. Only two percent had ten or more cows, eight percent had six or more pigs, and one percent had as many as 150 chickens. Needless to say the people in this open country community were depending on a poor paying cash crop for a living. In this case it was bright tobacco.

The housing situation in the community was not good. Twenty-five percent of the white families and 60 percent of the negroes lived in houses valued at less than $400. Seventy percent were without electricity, 95 percent without running water, 88 percent without power washers, 29 percent had no screens, and 51 percent no sanitary toilets. Fifty percent of them did not have an automobile.

Of the 404 families in the community, 52 percent were owners, 25 percent renters, and 23 percent croppers. The population was highly mobile with 39 percent having been in their present residence five years or less. Needless to say 55 percent of the families did not attend church

regularly and 75 percent did not attend any regular educational or recreational meetings. This is no horror situation. It is in many respects an above-the-average situation for Middle Atlantic and Southeastern States.

Such an analysis of a situation brings to light a balanced judgment. There has sometimes been a tendency for programs to be focused on the problems of the larger farmers who are producing agricultural products for sale. Program planning in Virginia has brought to light the fact that there are many subsistence farmers, part-time farmers, and rural non-farm families who complicate the rural situation quite as much as the man who is struggling to make enough cash out of farming to maintain a high standard of living. In fact, recent analyses have indicated that the greater proportion of all farm families have had to depend more on their cash from other sources than on the net cash received from the sale of farm products.

A brief summary of the work of our most advanced unified county will provide a good illustration of the nature and breadth of program which evolves in a county over a period of two or three years. The county was divided into eight communities, 54 neighborhoods and ten social and economic areas. Four of the areas were listed as good to excellent farming areas, one as a distinct part-time farming area, and the remaining five as widely differing problem areas. Of the five problem areas, Area A was recommended for subsistence farming with some limited emphasis on poultry and small fruits; Area C was recommended for public purchase and improvement for grazing and large scale farming; Area G for the production of timothy hay, red cedar posts and subsistence agriculture; Area H for the production of sour cream, sheep and a limited number of hogs; and Area J was recommended for public purchase and development as a forest and recreation area.

An entire office building has been rented and all agricultural agencies officed together; a special Soil Conservation District has been established and a CCC Camp secured; the Farm Security office has been moved in from a neighboring county and a special pre-standard program with two extra workers added and the case load increased from 22 to over 100; an REA coöperative has been established with 210 miles of line; plans are under way for a coöperatively owned and managed refrigerating locker plant; a livestock auction market has been established; an eighteen year old fight for a home demonstration agent has just been won; a special coöperative farm and home management research project was started one week ago in the disadvantaged area A referred to above; the triple A sign-up in the county has been increased nearly 30 percent after a lag for three or four years; and finally, a group medical care program is nearing completion, which will provide adequate medical care for 500 low-income families in the county on a flat rate, paid-in-advance basis.

Discussion

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EDITOR'S NOTE: Mr. Criswell discussed the paper of Bushrod Allin on "Agricultural Land Planning from the Federal Point of View," presented in this volume under *National Planning;* the paper of V. Webster Johnson on "Land Use Zoning," presented under *State Planning;* and the paper of B. L. Hummel on "County Boards of Agriculture," presented here under *County Planning.*

PLANNING on the National level must necessarily be broad in its scope and general in its presentation inasmuch as it deals with such items as exports, imports, industrial trends, national policies and Federal legislation. Such generalizations are ofttimes unappreciated by persons on a county level and even sometimes on a state level; yet, any sane thinking person must realize and admit that the progressive trend of legislation, policies, or procedures must, like a river, grow bigger and broader as it approaches its ultimate goal.

Dr. Allin in his paper "Agricultural Land Planning from the Federal Point of View" left us in somewhat of a maze as to the final objectives of the planning process. Yet, by studying carefully and analytically the questions raised, the statements made, and the treatment of many of the broad policies and procedures involved in planning, we must arrive at two or three conclusions: (1) The planning process, although not new, is different from any other coördinated activity ever undertaken; (2) Coördinated planning, although involved, is workable; (3) Definite accomplishments have been and are being made, resulting in the coöperation of agencies, the coördination of their activities and the greater effectuation of their programs.

The planning process on the state level has not progressed to the same extent and in the same manner as has the work on either of the other levels. As has been pointed out, there are many reasons for this: State representatives, giving attention to the matter of planning, have their various and fixed activities which always have and probably will continue to require the greater part of their time and attention. Farmer representatives serving on state committees, although in most cases capable, interested, willing and anxious to assist, have not yet understood the real functions of such a committee and ways and means by which they as individual members could best serve the planning process. In many States, this is being overcome at the present time by designating or setting up special committees to consider problems suggested by county groups or even problems determined by state committees themselves.

The real function of a state committee is to understand the planning process. Work at the state level, to be most effective, must guard against "a program of endorsement" of matters passing in both directions from the national to the county level. In the State of North

Carolina and, no doubt, in many other States, this stigma of uselessness is being overcome to some extent by subcommittee assignments and by special duties imposed upon committee membership which require active thinking, open discussion, and the formulation of committee opinion on certain matters pertaining to county problems, area problems, or state problems. Even with such progress, it still must be admitted that the planning process at the state level is, no doubt, the weakest point in the triad under discussion.

The paper presented on planning at the county level was quite complete and covered in detail the steps and procedures involved in county planning. To say this is the only way in which to accomplish coöperation and coördination would be false. It is, we must admit, one way, and a workable way, to do the job. Surely, we must all concede the point that farm men and women know their communities and their county and, in most cases, are capable of setting forth problems and suggested means for their solutions better than anyone else, including technical agricultural workers. At the same time, we must also admit that these farm people ofttimes do not and cannot appreciate limitations and functional responsibilities well enough to map out the most proper procedure of attack without the help of agency representatives in the field; therefore, with these two groups working together, a more satisfactory solution of the problem may be reached.

In conclusion, it should be made clear that the entire concept as now being proposed and followed at the three levels is new, different and only about two years old in its trial and application. During this period many of the ways and means and methods used in initiating land-use planning have been put aside as cumbersome, technical and no longer useful to the best interest of the planning process. Land-use planning in the future, in the opinion of many of us engaged in this work and somewhat familiar with its procedures, is destined to undergo even more drastic changes than have been made in the two-year trial period. It must lend itself to situations wherever they may be found in the field, and to administration on a far wider basis and with less technical guidance than has been the practice in the past. All of this naturally calls for streamlining, but to evolve a land policy or a National agricultural program, taking into consideration present and potential agricultural possibilities in the United States within a reasonable time, will certainly require some such procedure. Concerning these contemplated achievements, experience has taught us that the information is available, the latent leadership is in place, and that the planning process, with the free flow of ideas and suggestions between agency heads and farmers, can and must develop a program by the people and for the people, which truly represents democracy in action.

The Rural-Urban Fringe

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THE rural-urban fringe is the area of land beyond the built-up sections of our cities—the area where the land is used for both urban and rural purposes. In late years this periphery of the city has been termed by some the "rurban" area, meaning the twilight zone where the types of land use are a mixture of the urban and the rural.

Pattern of Land Use and Occupancy.—The most prevalent feature of the rural-urban fringe is the large acreage of apparently vacant land. Where this land is productive, the observer wonders why it is not used for agriculture or for recreational purposes, if it is not yet needed for building sites. Sometimes the vacant land has crumbled sidewalks and fallen street signs. Streets that had been laid out here are now overgrown with grass, weeds, and brush.

In the sections not too distant from the suburbs of the city the next most common scene shows the housing developments scattered here and there, apparently without any relation to each other. Why was it necessary to crowd the houses so close together when there is so much vacant land in the neighborhood? Why do people move to the outer boundaries of the cities and then live on just as small a parcel of ground as they had in the congested city?

These scattered developments often do not seem to have any streets in common. The houses are built, row upon row, on straight streets instead of on larger lots and on streets that add to the attractiveness of the community and follow the general contour of the land. The basic reason is usually that the *developer is merely developing a property instead of a community.* He has bought an old farm or other acreage property and is building on it mainly to dispose of the land at a profit.

In addition to the vacant land and the scattered building developments, the observer sees many other types of properties in the rural-urban fringe. Along the main highway, especially, there are service stations, hot-dog stands, local stores, and roadside vegetable markets. Then there are the part-time farmers who work in the city but live in the country and carry on some small farm enterprise. There are also many rural residents who work in the city but like to live in the open country. They have small acreage holdings, but do not try to farm. They may have a little garden, but most of the land is left in grass or trees. These rural residents have bought acreage properties without the aid of a high-pressure salesman. In contrast to these, the people living in the scattered housing developments probably do not enjoy any of the advantages they hoped to get when they moved to the more open country.

Farms are a minor part of the pattern of land use and ownership in the innermost part of the rural-urban fringes around our major metropolitan areas. Specialty farms are more common than general farms, because most of the owners of general farms have sold their land at relatively high prices. In the metropolitan area of North Jersey—embracing all of four, and part of three, counties—most of the commercial agricultural enterprises were found on specialty farms and 72 percent of the vegetable acreage was on farms that did not have any other additional enterprise. In South Jersey this figure was 50 percent. Likewise, 62 percent of the cows in the metropolitan area were on specialized dairy farms, as contrasted with 24 percent in Hunterdon County, one of the most important agricultural counties of North Jersey. This increased specialization on the farms in the fringe leads to the belief that farming in this type of area is looked upon as a commercial enterprise rather than as a way of life, as a result of the high cash costs for land, labor, and taxes. Only a most intensive type of farming can succeed. These statements apply mainly to the situation around the large cities. Agriculture is not so noticeably affected around the cities of 50,000 or less in population where the city influence does not extend so far into the rural area.

To complete the picture of the rural-urban fringe are golf courses, cemeteries, and other institutions requiring substantial land areas, which are called into being by demand from the city. Adequate room is not economically available for these uses within the city limits.

Forces at Work.—We read a great deal about the fact that our large cities have reached population stability. The new population trend is supposed to be countryward. People are supposedly becoming tired of the hustle and bustle of the city; they want homes in the country. Isn't it possible that the way in which we measure population growth may lead us to erroneous conclusions? If a city has much marketable vacant land within its boundaries, it will probably continue to have an increase in population until all this land is developed. The cities that show so-called population stability may have utilized their surface space and be expanding outwardly into the fringes in preference to "vertical" expansion and resultant increases in density.

The present trend toward the outer fringes of the cities undoubtedly is fundamentally a part of a process which has been going on since the cities were founded. An analysis of the real estate advertisements in the newspapers will show that there was much activity in real estate on the outskirts of metropolitan areas as early as 1890. This was before the advent of the automobile. Railroads brought the people out to the country in those days, while horse carriages were provided to carry the prospective buyers from the station to the development. Expanding population has generally created a demand for new home sites. Subdividing usually has proceeded in advance of immediate actual needs.

Subsequent events alone could determine whether these developments exceeded actual needs, as has so often proved to be the case.

Studies made of two selected "rurban" areas by the University of Connecticut showed that about 50 percent of the families moving into the areas were newly-weds or had children less than 10 years of age; and 90 percent of those moving into the areas in recent years had been renters. This indicates that most of the movement countryward is just a part of the natural process of establishing homes for an expanding population.

The people who move to the fringes undoubtedly have some want or wish that influences them in selecting a home site in the country or "rurban" fringe. It is probable, however, that the profit motive on the part of the speculators and developers is the greatest force in determining the direction of development. The hopes, desires, and aspirations of individuals comprise the field of human motivation which is exploited by real estate promoters and developers. This exploitation can be socially desirable or undesirable, depending upon how it is directed by each individual developer and how much it is guided by public policy in regard to the direction, extent and degree of land development.

Transportation facilities are effective in determining the direction and extent of urban growth into fringe areas. A good illustration is the location of homes all along the highway and the trolley line running from Albany to Schenectady, in New York State. The trolley was undoubtedly built primarily to connect the two cities. Because this transportation was available, home building took place on a relatively narrow strip of land the entire distance of thirty miles between the two cities. Likewise, development early took place along the railroad systems in northern New Jersey, for commutation to New York City.

The land between Philadelphia and Atlantic City has been subjected to much promotional activity in the selling of small farm plats and home sites, because of the presence of railroads and, in later years, good highways. Much of the intended development along these facilities in the sandy section of New Jersey never materialized because the land was not well suited to agriculture; there were few, if any, local industries; and conditions for home development were not especially advantageous. Transportation facilities influence the direction of development, but do not necessarily determine its quality.

Problems Created.—In a complex civilization, with multiple human and institutional relationships, the complete effects of a force like urbanization are not all visible to the eye. One can see the acres and acres of vacant land and can surmise the amount of money that has been wasted on crumbling sidewalks and curbs. But there are other problems fully as important as these, which have arisen as a result of the countryward trend of the city.

When premature subdivision takes place in a municipality which has heretofore been primarily a rural community, it soon finds itself grappling with the problem of reconciling expanded public costs with an unsound tax base and increasing tax delinquency. The town fathers are at first delighted to learn that the assessment of a large number of lots substantially increases the tax base. This may at first make possible a lowering of the tax rate and of the total tax bill of the permanent property owners. This slack, however, is invariably taken up by increasing costs for the maintenance of streets, and for the servicing of indebtedness incurred for improvements.

After a lapse of a few years the municipality often finds that many of the surplus lots have not been developed and the owners have ceased to pay taxes. Because tax collections have not met expectations, a shortage of funds for necessary expenses occurs. Then by following through on the tax-collection process, the municipality finds itself owner of many nearly valueless and unmarketable vacant lots, while the remaining property owners find themselves paying for "dead horses," through heavier tax bills. Thus may be induced a spiral of increasing tax delinquency, shrinking tax base, heavier rates, further delinquency.

Premature subdivision is a very realistic problem in the vicinity of most of our cities, as has been clearly shown by Mr. Philip H. Cornick in his studies of the problem in New York State; by others studying Chicago, Detroit, and Cincinnati; and by the Planning Boards in various States. One municipality in New Jersey had a rampant real estate boom in the 1920's, and began immediately to assess the lots at $25 each. The large number of lots soon had an assessed value of $1,500,000, about 20 percent of the total tax base. As was to be expected, most of the new owners paid no taxes. The New Jersey tax system requires that the municipality pay all of the State and county tax levy, regardless of whether the taxes are collected at the source. The municipality soon found itself going in debt because it could not meet all of its operating expenses in addition to paying the State and county taxes. It has now reduced the assessment to $1 for each vacant lot located on the fringes of the urban section but even so, lots remain a financial burden, for taxes collected on the $1 assessments do not even pay the cost of the paper and postage required for sending the tax bills to those owners who continue to pay taxes.

In most States the municipality is not required to pay out-of-pocket cash on the unproductive portion of its tax base. In Pennsylvania, the tax-collecting district pays to the other governmental units only its proportionate share of the taxes collected. This is a much sounder system than that used in New Jersey; it distributes the burden of tax delinquency among all of the governmental units concerned, and induces in the State a greater interest in the financial soundness of the local municipality.

School problems often arise when an essentially urban population overflows into a rural municipality. This is particularly true when the developments are low-priced homes and the new population is a low-income group. A certain municipality in New Jersey is located about 40 miles from New York City in a swampy section of a township. The land is being subdivided into ¼-acre plots by a promoter in New York City. There are now about 100 small houses back in this wooded swamp. Deep ditches have been dredged along the roads to facilitate drainage. There are no improved roads or streets. Most of the people carry their water from nearby wells. The children have no place to play except on a township road leading through one edge of the development. Mail delivery is made in a row of mail boxes on a main road one-quarter to one mile distant from the dwellings.

Along with these individual disadvantages, this development is a problem to the township, as the added school population has crowded the township school. The taxes these residents pay are not sufficient to pay the added school costs. In addition, until recently, the township had to provide home relief and work relief to many of these families. Since this development started, township officials have been considerably interested in planning and zoning but the interest came too late to prevent this municipal problem.

Undesirable development in the rural-urban fringe brings a lowering of property values. This is injurious to individual home owners in the vicinity, who find it difficult to sell property without taking a loss. The municipality suffers because assessments must be lowered. In a certain municipality a gradual expansion of its residential section was occurring, one phase of which involved the construction of several costly houses adjacent to the municipal line, opposite a tract of about 200 acres of land which had been idle at least 10 years. The 200 acres are now being developed for industrial purposes, to the sorrow of the nearby home owners. Coöperative planning on the part of these two municipalities could have guided the development so that property values and home owners would not have been adversely affected.

Many residential sections in the fringe areas are started in advance of the provision of public sewage and water facilities. The fact that this problem does not break out more frequently in the form of epidemics of disease is a tribute to the fact that most organized communities have health boards which early detect anything that might become a menace to the public health.

A Program of Action.—Most of the planning tools necessary for the guidance of the direction and degree of development have been worked out. What we need to know is how to use each tool on a given problem.

Zoning by use districts is a tool that needs to be used with proper balance; much has been written about the excessive areas zoned for

business purposes. Highway zoning can be considered as a separate tool. This type of zoning would help to prevent undesirable development in the fringe areas and in the rural sections of the country. The designation of building setback lines and the specification, on the part of land developers, of a minimum cost of dwelling are types of action that can be used to some extent to guide development in the residential sections of "rurban" areas.

The specification of a minimum size of lot or acreage holding should be used more extensively in "rurban" areas. This, more than any other control measure, would protect the livability and rural characteristics of the sections beyond our cities. If the building sites were large enough, it would almost automatically prevent any situation which would be termed a menace to public health because of population congestion. It would also prevent that part of chronic tax delinquency which is attributable to the subdivision of land into lots so small that they almost immediately lose their resale value.

In many instances, it would appear to be in the social interest for cities to buy up farm land to create greenbelts or green wedges around the city, as discussed in the report of the Urbanism Subcommittee to the NRPB. Such greenbelts could be used for golf courses, parks, and other types of recreation. If a waiting period were indicated, some of the land might be temporarily leased to farmers for agriculture.

Foreclosure in rem.—for acquiring title to tax-abandoned land is a remedial measure which will do more than anything else to make possible the replanning of many districts that have large acreages of abandoned land. This procedure is directed against the land, whereas the usual court procedure is directed against the owner. It is a simple, effective, and inexpensive method by which the municipality may obtain marketable title to low-valued tax-abandoned land. After the marketable title has been acquired, groups of lots can be replotted for a more desirable pattern of residential properties or they can be converted into public parks and playgrounds.

In Conclusion.—Urban and rural planners have much in common in the promotion of well-being in the rural-urban fringe. The urban planners want to see these areas developed efficiently and in such a way that the future residents will find these areas really desirable places in which to live. The rural planners have the same objective.

Social planning in the rural-urban fringe is made difficult by the variety and complexity of the competing types of land use, some of which spring into being because of the comparative absence of public regulation. In most instances, community interest is not strongly developed, because of the variety of places from which the new residents come and the diffusion of their occupational interests. These difficulties should be considered challenges rather than stumbling blocks to good planning in the rural-urban fringe.

County Land-Use Plannning

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AS LONG as our food and fiber needs can be produced by a much smaller population than that now residing on farms, should national policy give every emphasis to encouraging and assisting an increasing number of farm families to move into other occupations and remain there, or should it be concerned with maintenance of a maximum number of families on farms because of certain inherent individual and national values that are supposed to accrue from life on the farm?

Critics of the county land-use planning process frequently point out that local farmer committees usually recommend larger average-size farm units, which means a decrease in the number of farms, and do not develop any specific plans for taking care of the farmers that would be displaced if the committees' recommendations were carried out. Local land-use planning committees, like most other planners, have not yet reached that state of perfectibility where they can resolve all their difficulties into happy solutions. They have proceeded to a point, apparently, where they are quite certain there are too many people dependent directly upon agriculture for their income for living. Is it likely to be helpful to recommend that any farmers displaced through the adjustment process should be given new farms by clearing cutover regions, draining swamps or irrigating arid land? This is not to imply that some of our current production might not be advantageously shifted to such undeveloped areas in the interest of efficiency of production and conservation of misused resources.

Perhaps it is too much to expect that farmer committees should seek to find places in agriculture for all the population now living on farms, if this means that large numbers of families must follow subsistence or "grub stake" farming. These are popular terms for planners who are looking for easily prescribed solutions for our agricultural problems, but how long can grub-stake farmers be expected to content themselves in a world where their neighbors have many of the conveniences of modern life? It may be true that grandpa was happy on his little farm that was very largely self-sufficient, but perhaps this was true largely because another grandpa lived on each side of him; in fact, he lived in a world of grandpas. Would he have been so content if as neighbors he had had commercial farmers, or non-farmers with their automobiles, electric refrigerators, radios, and miscellaneous gadgets?

Advocacy of subsistence or grub-stake farming as a temporary expedient, if recognized as such, to be resorted to only while a concerted and widespread effort is made to further develop and harmonize agri-

cultural and industrial planning efforts, does not give rise to the same degree of defeatism or hopelessness in planning as does insistence that it is a desirable and enviable mode of life or all that many families can ever expect to attain. But is there not a tendency for this type of temporary expediency to perpetuate itself, at least to the extent that it diverts a considerable amount of attention of planning and action programs in this direction and reduces the pressure for more satisfying solutions? Forward-looking planners can afford to adopt such far-from-home compromises only by redoubling their efforts toward planning for industrial employment of a larger percentage of the population not needed for basic food and fiber production on farms.

Agricultural planning still is struggling through its infancy as an organized endeavor on the part of a significant number of planning participants; but is it not apparent already that such planning must look forward to a much higher degree of integration with industrial and other segments of planning, if some of the most perplexing problems in agriculture are going to be tackled with a view to working out ways of doing something about them? Much experimentation with planning procedures and organization may be necessary before agricultural and industrial efforts in planning can be harmonized and much progress made toward this type of integration. Perhaps a good place to begin this experimentation would be in rural-urban fringe areas.

Considerable thought is being given to the feasibility of a rural conservation works program as a means of more effectively employing surplus labor in rural areas; in the event that there may be an increase in this surplus at some future date. Further development and refinement of this idea would appear to be a job on which state and local land-use planning committees could make very effective contributions. It is an undertaking which planning committees can grasp in the early stages of their work. In developing recommendations for specific priorities of local conservation works opportunities on which publicly employed labor should be used, it would be necessary for the committees to go through a planning process similar to that now being followed by many community and county land-use planning committees. However, there would be something more obvious and specific around which they might orient their planning efforts. Before they could suggest works priorities it would be necessary for them to think in terms of desirable adjustments that should be made in the local economy and then to make decisions regarding the relative importance and urgency of these adjustments. In a given area it might be necessary, in order to recommend desirable public works projects, to decide whether adjustment should be made in the direction of increased emphasis on conservation and improvement of farm land, rehabilitation of forests, further development of the recreation industry, or combinations of these.

IN THE CITIES AND TOWNS

Planning as an Administrative Process

I—Donald C. Stone

Assistant Director in charge of Administrative Management, Bureau of the Budget, Washington, D. C.

PLANNING is not an end in itself. It is nothing more than an incidental phase in the accomplishment of work. I have the feeling that somehow or other we have let the idea of planning become involved with too many theoretical notions and have tended to think of it as something isolated from the ordinary day-to-day job of administration. Whatever the cause may be, a great many administrators think of planning as something separate and apart from administration, a mystical idol to be kept in a showcase and uncovered for the inspection of curious visitors from distant points.

Instead of being an unnatural element of human behavior requiring the application of professional minds with a peculiar bent and training unlike other men's minds, planning is actually the daily thinking and action of every administrative official, ordinary and extraordinary. Any person who must organize and direct the efforts of others in carrying on work necessarily engages in planning every day of the year. The planning may be of a misguided or personal kind which is detrimental to effective results, but it is nevertheless planning. And planning of some sort is an ever-present ingredient in the administrative process.

As I view it, planning is no more than the gathering and analysis of pertinent information, and the drawing of a conclusion therefrom as to what a future course of action should be. Inasmuch as the problems which the administrator must resolve, or propose recommended solutions for, are of every conceivable kind, it is obvious that planning must deal with a wide variety of subject matter. The subject matter, however, always falls into two classes: (1) Substantive or technical subject matter with which the agency is dealing. Planning in this area is variously termed resource planning, program planning, technical research, et cetera. (2) The second class of subject matter is concerned with the development of sound organization, the method of staffing the organization, and the direction, coördination, and control of operations. Planning in respect to such matters is often referred to as administrative or management planning. It is this latter kind with which we are primarily concerned in the present discussion.

Let us look at a few examples of these two types of planning. City officials considering whether or not police protection should be increased, a sewage disposal plant built, or a revision made in the local school curriculum, are engaging in *program planning*. When they con-

sider whether district police precinct stations should be closed in favor of central operation, or whether the director of public works should be given the additional responsibility for the superintendence of the sewage disposal plant, or whether the business manager of the school system should be responsible to the superintendent of schools or directly to the school board, these officials are engaging in *administrative planning*. And it is quite likely to be the same officials who are doing the two kinds; in fact, they may be studying the program and its method of administration at one and the same time.

A state health department engages in program planning when it analyzes the infant mortality rates and causes of death in the various counties of the State in order to decide the steps which might be taken, in conjunction with the county health officers, to bring about a decrease in such deaths. But when the State health commissioner ponders over the extent of authority that he has or desires over the county health officers, he is doing administrative planning.

When reaching a decision as to the number of additional cruisers, airplanes, tanks, and other supplies needed for the Army, Federal officials are program planning. If the matter is a question of the efforts required to reclaim mined soil, the building of a dam for power and navigation purposes, or the computation of the funds required to finance the old-age assistance program, then program planning considerations are paramount. At the same time, administrative planning is required to determine *how* to organize best for carrying out the program, what personnel and equipment are required, how the field activities can be effectively directed and coördinated, and the procedures which will insure speedy handling of the work.

The line between program planning and administrative planning in many cases is very faint. This is one reason why the meaning and content of administrative planning has not been as clearly understood as it might be. It is also one of the reasons why the two types of planning are not entirely separable.

I wonder if one of the reasons why so much of our planning has missed fire is the lack of understanding of what administration is, or in the words of the subject assigned to me, the "administrative process." We speak of administration as being the organization and direction of persons in order to accomplish a specified end. But these are just vague words. Their interpretation lies in an examination of the day-to-day, hour-to-hour, and year-to-year juxtaposition of persons, ideas, and events in an organization engaged in carrying out some specific program of work. Administration is the simplest of actions, like the signing of a letter, the reporting to a superior of the need for more funds, or the interview of a complainant. I was going to say the hiring of a person, but that is by no means a simple action! At the same time, administration consists of the most complex of actions—the inauguration of a

crime prevention program, the conduct of hearings to fix bituminous coal prices, the certification of a state public-assistance plan as being in conformity with established Federal standards, or the layout of a city water system.

Most people tend to think of administration in grandiose terms, as being only actions of great magnitude. Actually it is the simple, as well as difficult, every-day decisions and acts which in the aggregate become administration. A report came back to me the other day of a talk given by a very competent, successful Federal administrator to a meeting of the junior members of the American Society for Public Administration. He had told them about a troublesome case he was handling. A claimant had been taken violently ill one day in a field office and the office manager had called in a doctor. Later on the doctor petitioned the Federal government for payment of the bill because the claimant had refused to pay. Said the Federal administrator to the prospective junior administrators, "If you don't like to straighten out all kinds of small troubles like that, you won't like administration. It's not all making decisions on the principles of public administration as they are written in the textbooks."

Whether or not these administrative actions—simple or complex—are carefully thought through and contribute to effective results depends upon the degree to which pertinent facts have been gathered, examined, and analyzed prior to the decision, and sound judgment exercised in making the decision. At this point it is pertinent, I believe, to point out that administrative decisions and the planning that lies behind them are not something done alone by the top administrator, or by him with the assistance of some special person designated by him for that purpose; rather it is the result, in any effective organization, of the collaborative efforts of all persons in the organization, and of a free flow of information and understanding upward and downward within the organization. Administration is not something imposed upon subordinate employees; on the contrary, it is the successful molding together of employees to produce a harmonious set of relationships, which, with a minimum of direction, will carry on the program of the agency. One might call it the effort to eliminate constantly arising frictions in relationships.

If the administrator's functions are simple and his organization very small, he may not need special assistance in either administrative or program planning work: he and his operating subordinates may have the time and skill to do it unaided. But when organization deals in complex program and administrative problems—and every major unit of government falls within this category, whether city, county, State, or Federal—provision for specially qualified persons to devote either part-time or full-time attention to both program and administrative planning problems becomes essential. It follows also that provision for such spe-

cial planning activities must be located wherever in the organization there is responsibility for making decisions which require more program and administrative analysis than the operating official personally has time to give. Accordingly, planning is not something to be done solely at the top level in an organization; attention must be paid to it at all stages in the administrative process where it can most effectively implement sound decision and action.

It should be obvious that these planning facilities can not be established outside of the control of the chief executive. One of the reasons why planning bodies have not been utilized more generally by administrative officials, particularly in local governments, grows out of their frequent creation as super-governmental agencies which serve as a check upon the administrator, or which tend to dominate administrative action while outside the stream of administration.

The type of planning which I have been discussing is an integral element of administration, and any facilities it may require are tools of management which must be attached directly to the administrative officials if planning efforts are to bear fruit. Being tools, planning units have no part in policy determination, except as they assist the executive in his submission of policy questions to the legislative body, or as they assist operating officials in carrying on their work.

It is, of course, essential that both program planners and administrative planners have the confidence and respect of operating officials they serve. Should they tend to insert themselves into the operating line and to make administrative decisions, they will reap a justified prejudice and distrust. On the other hand, it is essential for operating officials to understand and realize the significance of their actions in terms of the administrative process, their effect upon long-range programs, and the balance they are carrying in effective administration. In the press of daily operating responsibility, long-range program objectives and sound administrative management may be whittled away by the accumulation of hasty or unplanned decisions.

Great strides are being made in the Federal government, in my opinion, in bringing about better program and administrative planning through provision of necessary planning facilities at the various levels of the governmental structure. In the Executive Office of the President, functioning as management aids to the President, we find the National Resources Planning Board and the Bureau of the Budget. The Resources Planning Board is concerned mainly with long-range problems of the physical and human resources of the country, the conservation of the country's natural resources, the stabilization of employment, et cetera. The Bureau of the Budget, on the other hand, is concerned with the program and administrative planning of establishments of the Federal Government. Any budget is essentially a program of services and work to be performed, translated into terms of funds

required to provide the necessary organization and staff facilities to carry out such programs. Every step in budgeting constitutes both program and administrative planning. The recent establishment in the Bureau of the Budget of the Division of Administrative Management to give concerted attention to problems of organization, management, and procedures within the Federal Government is a natural development. The large number of requests, both formal and informal, for its services is one indication of the need for such a unit. From this central point, the departments and agencies of the Government are being encouraged and helped to establish adequate budgetary, administrative planning, and technical planning and research units, to the end that both program and administrative decisions within such agencies may be sound.

"Planning as an administrative process" is a well-turned phrase. I only hope that we do not lose sight of the basic elements of planning, the substance of which it is made, the people with which it deals, and the manner in which it may most effectively be carried on, in the vagueness of specialized language and psychologies. Let us not envelop it with a halo of mysticism which tends to obscure its real meaning and method to the very persons whom it is servicing—administrators of government programs and the people to whom the programs belong.

II—Robert A. Walker

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PERHAPS there is only one kind of planning, but I have discovered that is is hard to secure agreement on what it is. I am not confining myself to city planning as that term is generally understood—that is, the planning of streets, parks, civic centers, transportation, subdivision control, and zoning. I do not exclude these things, but they are not my principal interest.

I believe we can talk about planning in a way that is equally valid for city, state, or national government when we discuss the relation between planning and administration. So simple a definition of planning as "looking ahead" is useful here. If we say that to plan is to look ahead, we have drawn the main line of argument for what follows. But I should like to narrow this down a bit.

In both industry and government it is possible to distinguish between two kinds of planning. One, at the level of factory management and bureau function, is primarily concerned with the manipulation of facilities to produce the product or achieve the immediate purpose for which that branch of the enterprise is responsible. At this level, planning frequently involves engineering problems or a high degree of specialized knowledge—for example, designing of an airplane assembly line or planning the movement of fire equipment in the event of a three-alarm

fire. Another kind of planning takes place at the level of over-all administration or general policy determination. Dr. Harlow Person, past president of the Society for the Advancement of Management, has termed this "administrative" planning as distinguished from the functional or "managerial" planning which I have just mentioned.

Administrative or general policy planning is the responsibility of the recognized policy-making body and the chief executive. In large governmental units department heads also exercise an important responsibility for this type of policy planning. It is this kind of planning which I should like to talk about here for the next few minutes.

The executive or administrator who heads an important governmental unit has two important tasks—he is increasingly responsible for shaping general policy, either within the terms of broad legislative authority, or for legislative consideration, and at the same time he must make an endless series of decisions on specific problems. In day-to-day operations these melt into one another, for it is in the handling of this problem and the weighing of that decision that policy is made effective or even determined. Laying down general policy and planning are to all intents and purposes synonymous. If we can imagine the mayor of Philadelphia or the Secretary of Agriculture sitting back in his chair and reflecting privately on matters of policy—the mirage which most busy administrators struggle to reach and seldom find—he is planning in the full sense of the word. If, at the opposite extreme, he is hurriedly turning over a question mentally while talking to an insistent councilman or Congressman over the telephone he is in all probability trying to see the consequences of his reply. He is trying to look ahead, to plan a little.

Planning is, in other words, inherent in administrative action. How much planning an administrator is able to do depends upon several factors. The first and most obvious is his ability. A second consideration is time. Ordinarily an executive is pushed and hauled from one urgent thing to another, day in and day out. Some questions must be decided on the spot—others may be put off until tomorrow, next week, or even indefinitely. For those problems which must be settled at once, planning can go a little farther than the hurried weighing of alternatives mentioned earlier. With respect to matters permitting of some delay the possibilities for careful planning increase in proportion to the time available.

Still another consideration in determining how much planning an administrator will do is the assistance he has available. Postponing decisions will do little to faciliate planning if it means only that an executive can worry about something else for awhile. If, on the other hand, he can turn the problem over to someone for study and consideration a real contribution may be made toward a satisfactory solution.

It is at this point that a separate planning agency takes its place in the administrative process. If the administrator has available a staff which is set up wholly for the purpose of planning, free of ad-

ministrative responsibilities, he will have someone available to give any specific question immediate study. If this staff has been preparing long-time plans for the field or fields of activity to which this question is related it is so much the better prepared to deal promptly and intelligently with the problem. If it has not yet done this, it can make a contribution by making as thorough a study of the matter as time will permit, and making its recommendation to the administrator.

This is, I believe, the proper role of the planning agency. It should function as an immediate aid to the responsible executive, both in exercising his responsibility for over-all policy planning and in making his innumerable daily decisions. At the planning level, as at the administrative level, these fade imperceptibly into one another. The planning agency should work steadily toward long-time plans for the various activities of the city, state, or other governmental unit to which it is attached. It should endeavor to tie these together into a general or over-all plan which will give a common direction to different functions and provide a guide for individual decisions. But it is in these individual decisions that plans are carried out or die, and over-all planning will be sterile if it is not tied directly into the daily routine work of administration.

I believe the implications of what I have been saying for planning organization are clear. The planning agency should be a branch of the executive's office, and it should have at the head one person, fully in the confidence of the occupant of that office, with whom he can consult readily and easily. Any plans or reports which are published should have the prior approval of the responsible official. The planning agency cannot take the place of an alert citizenship or of active citizens' organizations in promoting policies or making the incumbent administration behave itself. It is, and should be, an agency of government, and like other such agencies it must be responsive to the men in office. If it is not it will die for want of funds.

Planning is, then, but one aspect of governmental administration. It is fundamentally part of the administrator's job, but he needs assistance to do it well. Planners and planning agencies can play a vital part in administration. They will, however, have to adapt themselves to the areas of most pressing need. Administrators are at present calling upon those around them for this kind of assistance.

This is true whether or not special planning agencies have been established. Within the Federal Government the need has been recognized and several such agencies have been created within the past few years. In the cities, on the other hand, executives are only rarely turning to the official city planning commission for such assistance. The organized planning movement can make a real contribution to better government if it will redirect its efforts toward encouraging the kind of planning agency which administrators need and will use.

III—JOHN NOLEN, Jr.

Director of Planning, National Capital Park and Planning Commission, Washington, D. C.

THE subject of this discussion implies that planning is, or should be an administrative process *per se*. Perhaps some will argue that it should be, but significantly, there is nothing in the record to show that it has been in the past. In fact it is difficult to see how planning in a democracy could be the creative and directive force in community life which its proponents argue it should be, if it were an administrative process in the usual sense of the word.

It is increasingly evident, however, that if our democratic way of life is to survive, regardless of the outcome of World War II, we must have planning of the most realistic and virile sort throughout our governmental structure. Economic pressure from within or from without will undoubtedly make people think more intensely and more realistically of their common problems than at any time heretofore. Instead of the old motto of *Unite or Die*, the new motto for our civilization might well be *Plan and Survive*. We shall undoubtedly have to do more real planning—objective planning.

All of this we must and will do in the democratic way, gradually evolving a new order in planning, much more directional and objective than heretofore. Recalling our progress in the development of the planning idea over the last three or four decades, we see more clearly what the trends and needs of the future will be. Dr. Walker in his new book on the "Planning Function in Urban Government" has traced well the evolution of the modern planning movement from its initial concept of the City Beautiful, down through the Zoning and Subdivision eras, to the Comprehensive Plan stage. Looking ahead, he lists the "Emerging Problems" outlined in the report of the Urbanism Committee. This relatively rapid and changing scope of the planning function would seem to portend at least equally important changes for the future.

All of this change in the concept of planning has paralleled an expanding concept in the so-called administrative functions of government, significant because they, too, have been responding to the economic forces and needs of society. The advantages of new schools, highways, health centers, swimming pools and golf courses are readily visualized as something to be used and enjoyed, but a planned community, to the ordinary citizen, is a nebulous ideal. Thus it has been relatively easy to reorganize or expand the functions of government to provide such facilities. These extensions of the governmental function have of themselves led of the need for more and more thought on the general purposes and objectives of government in its service to society, *i.e.*, on the primary purposes of comprehensive planning.

During this period in which planning has come of age, its relations with the administrative agencies of government have become more

and more realistic. At first planning was sponsored by civic and commercial groups, and gradually independent advisory commissions were set up but with no specific powers or duties. Later, upon passage of state enabling acts, planning commissions were authorized to make comprehensive plans and even to control new subdivisions and to participate in the zoning process. Communities soon realized that much of what the planning commissions had proposed in their advisory capacity was having little influence on the major problems which the administrative agencies individually were attempting to solve. Meanwhile expanding budgets worried taxpayers, large blighted areas became insolvent and tax delinquent. Rigid budget and fiscal controls were set up, and while this reduced the pressure from (and on) the taxpayer, it did not solve any fundamental problems. The planning process was not functioning.

In spite of this experience, the reason for having a city planning commission to determine long range policies for the community as a whole has not changed. Referring to Thomas Adams' definition of physical planning in his "Outline of Town and City Planning," he says, "city and town planning is a science, an art, and a movement of policy concerned with the shaping and guiding of the physical growth and arrangement of towns in harmony with their social and economic needs." The significant part of this definition is, of course, the dynamic quality of planning, expressed by the words "movement of policy ** in harmony with ** social and economic needs." For in this field, planning is the prerogative of the whole community and not that of an individual alone, whether he be an appointed administrative official, an elective official, or even a legislator elected for a brief term of office. This fact, more perhaps than the desire to make the planning board independent of politics, was what gave rise to the original planning commission as the desirable form of organization for planning. Nothing that has happened or will happen, so long as our form of government is democratic, will change that reason. It might be said, though, that in our desire to free the planning agency from political dictation we have often severed any effective connection between the planning agency and politics through which alone the advice of the planning agency can be brought to realization. If planning has not been effective, that is more likely the reason; but it is not a reason inseparable from the advisory capacity of the planning agency.

An example may help to illustrate this distinction. New York led the way for the inception of zoning as an important instrument of planning control for American communities. Today it again leads the way with an active City Planning Commission and a Department of City Planning definitely organized not only to carry on the usual planning functions of preparing a master plan of land use implemented through zoning, but also it is investigating the older, underlying prob-

lems of the modern city which remain unsolved. Through its initiative in preparing the capital improvement budget, the City Planning Commission is in a position to exert a directive influence on the future of New York quite different from that which predecessor commissions have been able to exert in the past. New York apparently has been the first city to see that it must plan to survive. Through having a Department of City Planning to carry on the routine research and design functions of the planning process, the Planning Commission is left free to handle matters of major policy.

Out of all this it would appear that the planning of the future for cities, towns, States and even on the national level, must be more positive and more objective than in the past—positive in the sense that it must be effective through closer tie-ins with administrative agencies and policy by an opportunity to submit reports and review budgets, and objective in the sense that we must continue to have planning agencies representative of the aims and objectives of the whole community in order that they may help to create the kind of community the community wants. This a planning agency could obviously not do if planning was merely a departmental, administrative function.

IV—P. H. ELWOOD

Chairman, Region VI, National Resources Planning Board, Ames, Ia.

EVEN though we recognize the logic of placing planning in the executive department of government with a competent staff and suitable appropriation for a constructive program, most cities in the United States at present are not able to achieve these goals. Furthermore the complicated procedure of integrating able planning practices into each departmental program may result in losing sight of the more important task of coördinating all branches into one general broad plan or program. If we are not watchful, we planners will also fail to see the forest, because of the confusion of many branches and individual trees in the administration. Mr. Walker's book on this subject should be required reading for all students of government and planning both in and out of school.

Granting the soundness and sheer logic of basing all physical plans upon a solid foundation of social and economic facts, and with problems of human welfare always in mind, we must also remember that planners of our physical environment worthy of the name must be familiar with and sympathetic to these vital factors. The officials and the great mass of the public are yet unhappily unfamiliar with, and all too often unwilling to look beyond, the physical evidence of planning. Through these examples we are often able to achieve and accomplish much in sound betterment and make real advancement in long-range economy.

Because I am in the field of education, you will, I know, pardon me for eyeing the whole planning process from the educational point of view. There are certain inherent weaknesses which nothing but thorough educational measures will strengthen. First it is trite to say we must have a well-informed and interested electorate. Plans without public support are futile. But perhaps a more immediate need is for an intelligent understanding and recognition of planning by elected officials, administrators and bureaucrats. If our planners are realistic, they themselves must be the educators of these agents of government by basing their plans and perhaps idealistic dreams upon sound financial and social needs and considerations with costs of operation and administration included.

Another important need even less understood is the education of many of our colleagues, the planners themselves. This is no reflection on the technical training of our engineers, architects, landscape architects, city planners, economists and sociologists as such. But all, almost without excepting any group, sadly need training and practical experience in collaboration and coöperative planning. It is this lack of proper coördination that is today hampering the planning program. There is a lack of mutual understanding. Tragic evidence of this is so prevalent that we can see examples at nearly every level of government.

Planners must not be considered an isolated group but must be in daily contact with administrators to keep their plans realistic and flexible and adapted to conditions of the moment. These contacts should include periodic checkup with the budget director. If so geared together with all branches of government like a multiple engine on a single shaft, tremendous progressive power will be applied toward social and economic welfare. It has been my firm belief that all good planning pays and can be, in most cases, economically justified. Even esthetics are now recognized by the courts as contributing to the "general welfare."

To be effective on a long-time basis, planning should be compulsory to maintain continuity and to avoid the evil effects of the ins and outs of politics which are always fatal to the kind of planning we are advocating.

As to the machinery for planning and the composition of the planning commission, I believe most of our cities and communities are not yet ready for a separate division of planning close to the executive. The combined ex-officio and lay board, with final authority only on strictly planning interpretations and otherwise advisory only, for the present is the arrangement most likely to succeed. The planning commission, of course, must have permanent, official status, suitable financial support and a competent, even though small, staff in order to insure the self-respect of the members and the production of effective plans. Thus the commission will be dignified and stand on its own re-

sponsibility and will not be, as is now too often the case, just a buffer or alibi for politically minded mayors and councils.

Concerning the relationship of the planner on the technical staff to the private consulting planners and engineers I may say that the routine and basic work in most instances can be done by the local planning staff but when major or unusual undertakings are involved the services of experienced consultants are very helpful and desirable.

The effective planners today must be not only good technicians, good collaborators, yes, even good politicians, but they must encompass all the three graces; and of the three, faith, not charity, for the planner is the greatest. With it, by using his creative imagination, he can look ahead, and by thinking can weave the evidence of the thing not seen and the substance of the things hoped for, into the master fabric of the future.

V—Russell VanNest Black

Consultant, New Jersey and Pennsylvania State Planning Boards, New Hope, Pennsylvania

THINKING of planning as an administrative process is a fine thing so long as it does not result in too much "process" and too little "planning."

The idea is one outgrowth of a reaction from the observed futility of static plans and static planning,—a flareback from years of overemphasis upon the value and usefulness of paper plans and printed reports. If not actually *sold* as working "blue-prints and specifications," certainly many of the earlier comprehensive plans were too much accepted as such by their purchasers. To these people, naturally more or less unfamiliar with the essential nature of planning, a plan for a city was like a plan for a house. You employed an expert to make the plan and proceeded to build the city according to plan specifications. Having gleaned his ideas you had no further use for the plan maker. You paid him his money and let him go.

Disappointment in the plan and in its working was foreordained. Two important factors were overlooked. First, the plan usually amounted to little more than a reconnaissance study based upon information both quantitatively and qualitatively insufficient (all that the usually much too limited funds could buy) and, as a working blueprint it naturally contained some flaws. And second, a city is a dynamic organism and not a static thing like a house,—cities are always changing; yesterday's perfect plan must be adjusted to today's unforeseeable new needs and circumstances; left on the shelves, the best of city plans must sooner or later lose much of its applicability.

Finding such faults in inherited plans, many administrators and others jumped to the conclusion that the plans were worthless and that not

much more could be said for planning; the plans, they decided, were just pretty pictures and planning, a pleasant exercise in theorizing. Planners and the more observant among the administrators countered with the idea that perhaps the fault lay less in the plans than in how they were used. They began to preach, "planning is a process."

Like many a too-well expounded text, "planning as a process" is subject to over-zealous application, leading to a neglect of planning in the sheer love of process. Such an eventuality, already threatening in some quarters, will bring inevitably as many disappointments as did the earlier over-emphasis upon paper plans. The process devoid of plans is as gainless as plans without process. Effective planning is the product of the skillful integration and proper balancing of the two.

Today we are discussing what appears to be a modification of the planning-as-a-process idea. It is called "planning as an *administrative* process." I frankly admit that I do not know quite what this means. Is it presumed that through some administrative legerdemain plans may be produced without going through the technical process of planning, or does it imply that an administrative saturation with the planning concept may in and by itself produce a planned result?

It is a little hard to credit such naiveté and yet one hears it said that planning is a point of view, or that planning is a coördinating process, suggesting the thought that planning springs automatically from "right" minds, or that comprehensive planning is merely a matter of "dove-tailing" a miscellany of externally-produced ideas. It shouldn't be necessary to search much farther north to find people believing that a good administrator can produce a city plan by waving a wand.

None of what I have said is intended to combat the conviction held by many planners and others that planning fails in the degree to which it is disassociated from the regular business of government. That I believe is self-evident and indisputable. My purpose is to point out the danger of entering so enthusiastically into this business of integrating planning with government and governmental administration as to forget that there is a highly technical job of plan making,—as to overlook the fact that plans are more than a body of policy—that they are comprised in considerable part of things which must be comprehensively conceived and comprehensively placed on a map.

Further, I should like to suggest that planning is not a single process but two processes,—two processes quite distinct in technique no matter how interwoven they may be in practice. One is the technical process of making plans and of keeping them up to date. The other is the administrative process of maintaining the integrity of plan and of putting the plan into effect. As the representative of government, the chief administrator of a city may be equally responsible for having plans made and for seeing that they are carried out. But this does not alter the

fact that the actual preparation of plans is and must remain a technical and not an administrative process. Each of the two processes must be in full cognizance of the needs and limitations of the other but each, in its operation, requires application of its own peculiar technique. I conclude, therefore, that there is something radically wrong about the the wording of today's assignment. The effectuation of plans may be in large part an administrative process but planning, so far as it pertains to the making of plans, is not.

This is so much of a truism that I am beginning to wonder if I may not have completely misunderstood our assignment. Perhaps it is not intended that we should discuss this business of plan making at all, but is expected that we may throw some light upon the current question as to whether the time may not have come to send the sometimes all-too-feeble planning commission or board off with the dodo bird to make way for some more streamlined planning mechanism. Some people seem to think that we would get further with planning, faster, if we threw the planning commission overboard and seated the planning function more directly in the government, either in the form of a planning department or of a single planning official, the same in either case to be directly responsible to the chief executive. The proponents of this form of planning organization contend that the planning commission, in its ivory tower, is so far removed from the regular processes of government that its approach is likely to be unrealistic, that such of its ideas as are sound are unlikely to get through to the responsible government and that, being to some extent a competitor in the production of ideas, it is more likely to engender antagonism than the spirit of coöperation necessary to the acceptance of commission proposals. There is the further contention that the planning-commission approach, justifiable in the earlier years, has served its purpose—that planning has now come of age and should assume its rank in the front line of government without more coddling by glorified groups of citizens.

Undoubtedly there is ground for such criticism of the planning commission. At the same time it may be well to remind ourselves that in planning, as well as with any other phase of government, the form of organization is less important than the kind of men who are doing the job. We grow impatient with planning's slow progress and perhaps too quickly assume that there is something wrong with the tools. And it is always easier and more agreeable to place blame upon the mechanics of the thing than upon the people responsible who, in this case, are ourselves—the planners, the planning commissioners, and the responsible governmental officials. None of us is too competent because good planning is an involved and difficult job. Whatever our inherent capability some of us give too little of our time and thought to planning even to begin to comprehend its broader implications. Still others of us comprehend planning too well and refuse it more than lip service for

fear that in its application it may interfere with pet ideas, personal interests, or accustomed patronage.

I am sure therefore that back of many planning failures lies much more than the misplacement of the planning function. Enough planning commissions have done effective jobs over sufficiently long periods of time to demonstrate that there is nothing impossible about the planning-commission set-up. On the other hand, I think it may be assumed that direct planning through the administrative process has always been available to local government without the benefit of special enabling legislation, and it is interesting to note that, in spite of the age old freedom to plan, the instances of worth-while planning accomplishment by municipalities, outside the planning-commission approach, are exceedingly rare.

Conceding, however, certain theoretical advantages in the "streamlined" approach to planning, there remains the question of the requirements for placing it in successful operation. In my opinion there are two prerequisites to effective long-range planning in the absence of a planning commission. One is an extraordinarily competent staff planner or planning director, able and willing to stand up against destructive pressures both from within and from without the government. The other is an administration thoroughly convinced of the need for and the value of planning, well versed in its essential procedures, and ready to accept it as a regular and continuous function of government. But, in passing, under such rare circumstances, planning will succeed no matter what its position in the administrative structure.

The day may come when such conditions will have become the usual thing. Then, planning will have arrived indeed. In the meantime, however, wherever the staff is inexperienced or weak or the administration is only half convinced, I believe that the planning commission serves an essential function and that without a commission to keep the planning concept alive not much planning will be done for long.

This is no brief for all planning commissions, however composed or however minded. Some planning commissions, like some administrators and some planners, aren't worth their salt. A planning board without a proper concept of its job and without the willingness or intelligence to do its job in a manner acceptable to a reasonable administration is indeed worse than worthless; it exerts an influence positively destructive of planning locally and of planning generally.

It is my conclusion that the thing we most need is not a revolution in planning method but better planning. Good planning will make its way no matter what the method.

VI—L. Deming Tilton

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PLANNING as an administrative process should be considered from two standpoints: (1) the general principles involved, and (2) the practical application of these principles. It is my purpose to discuss planning as an administrative process in the City of Los Angeles, with particular reference to new amendments to the Charter of that city providing for a reorganization of the City Planning Department. These amendments were recently adopted by a vote of 98,292 to 95,593 and go into effect July 1, 1941.

The sections of the old Charter of Los Angeles which established a City Planning Department, a Board of City Planning Commissioners, and defined the powers and duties of each were adopted in 1925. They were compromises at the time they were adopted, and in recent years have proved to be increasingly inadequate. No reference was made to a master plan and no means provided for the coördination of plans prepared by various city departments. The relationship of the planning to administrative and legislative functions was not clearly indicated.

The Charter amendments just adopted were designed to provide Los Angeles with a City Planning Department fully equipped and qualified to study and report objectively upon trends of growth in population, land utilization, streets and highways, transportation, recreation, zoning, blighted areas, and many similar matters. These subjects all present large problems in a city of this size and character. They all need consideration in a master plan.

The new Charter sections reflect much better than the old an understanding of the functions of the planning department, its relationships with other departments, and of the proper spheres of service and responsibility for technicians, officials and laymen. Each of these three groups has a part to play in modern city planning. The old Charter did not efficiently utilize the resources and abilities of any one of them.

The new Charter provisions of Los Angeles carry forward ideas represented in progressive planning legislation elsewhere, conform to the California planning act, and introduce several ideas that are somewhat novel and experimental. The general plan of the Charter is simple.

(1) A Department of City Planning is created, to have all the powers and duties conferred upon such departments by State law or by any ordinances adopted by the City of Los Angeles. Reference to the State law brings the operation of the City Planning Department of Los Angeles into harmony, as far as authority and procedure go, with other cities and the counties of the State which are carrying on planning under the basic planning statute of California.

(2) The Planning Department will be administered by a Director of Planning, who will be appointed by the City Planning Commission and

hold office under Civil Service. The primary duties of the Director of Planning will be to carry on and direct the technical work of the Department. He will be charged particularly with the duty of preparing a master plan for the city and of keeping it up to date.

(3) Two advisory groups, each having a different function, will have supplementary responsibility for the development of the master plan. The first group, called the Coördinating Board, will be a technical body composed entirely of city officials, including the City Engineer, the heads of Park and Recreation Departments and others concerned with uses of land for public purposes and with public improvements. In varying degree, these officials are responsible for the physical pattern of the City as it is determined by public action. They will advise and assist the Director of Planning and the Planning Department in the development of the reports, maps, and charts which will constitute the Master Plan.

The second group is the City Planning Commission. This will be a board of citizens, constituted as is the present Board of City Planning Commissioners, of laymen appointed by the Mayor. It will be the responsibility and duty of this body, representing the property owners and citizens generally, to hold hearings upon the master plan as it comes from the City Planning Department and to approve the plan as to form, content, and objectives. The hearings before the City Planning Commission will bring forth, presumably, the views of the public regarding the recommendations and proposals presented in the Master Plan.

If the City Planning Commission is convinced that the plan as presented is properly designed to achieve the broad objectives of planning—greater safety, better health, lower public costs, and more satisfactory living conditions for the people—and is not unduly objectionable to property owners and others whose interests are directly affected, it will approve the Master Plan. The plan will then be the approved Master Plan of the City of Los Angeles. Under the law, copies will have to be transmitted to the Mayor, Councilmen, and others who deal with matters affected by such a plan. Under the State law no plans or maps can bear the title "Master Plan" until they have been submitted to the public at public hearings by the City Planning Commission and have been adopted by such Commission. The Council and departments are held to observance of the Master Plan by the standard requirement of a two-thirds vote of Council to override an adverse report from the Planning Commission.

(4) Zoning, which at the present time absorbs such a large part of the time of the Planning Department and which for years has led the public to misunderstand the objectives and value of planning, is given its proper place. A new office, called the Zoning Administrator, is created and a new body, called the Board of Zoning Appeals, is set up for the handling of zoning variance appeals.

(5) The Zoning Administrator will be appointed by the Director of Planning, but he will have exclusive jurisdiction in the enforcement and administration of the zoning ordinance. He will rule upon all applications for variances, and those applications which were in order would be granted by him without review or further action by either the City Planning Commission or the City Council. If an application is denied, it would be upon either one of two grounds: (1) that the variance was not in order and could not be granted because the applicant could not make a bona fide showing of "practical difficulties or unnecessary hardship," or (2) that it was not a variance at all but an application requiring amendment of the zoning ordinance.

In the case of a refusal to approve a zoning variance, the applicant would appeal to a Board of Zoning Appeals, and their ruling upon the matter would be final except for review by the courts. If the ruling of the Zoning Administrator were that the application called for an amendment of the zoning ordinance, the appeal would be either to the City Council or to the City Planning Commission, but in either case the charter amendment will prohibit any change in the zoning ordinance without formal action and public hearings by both the Planning Commission and the City Council.

(6) The Board of Zoning Appeals, as indicated, will review only those appeals from the rulings of the Zoning Administrator which strictly come under the definition "variance." Neither the Zoning Administrator nor the Board of Zoning Appeals will have authority to approve "spot zoning" or make changes in district boundary lines. The rules and regulations which will govern the acts of both the Zoning Administrator and the Board of Appeals will be set up by the City Council in the form of amendments to the present zoning ordinance.

As the above summary indicates, the new Charter sections are understandable only by reference to the state law and to those modifications of present ordinances required to make the Charter fully effective. These Charter amendments will result in the creation of a Department which will be able, with proper direction, to develop a master plan of Los Angeles.

The people, in the last analysis, are the ones who suffer from the unfavorable conditions created by the lack of such a plan and by the general inadequacies of the planning process. Los Angeles, because it is a dynamic, growing community, needs a strong central planning agency. These new Charter sections will provide substantial legal support for its work.

The successful conduct of this governmental function called planning, however, depends quite as much upon personalities as upon fundamental laws. The officials now in charge of planning in Los Angeles are able and determined to make the new Charter machinery work better than the old.

Relation of Industrial Locations to Community Development

R. F. BESSEY, Counselor, Region IX, National Resources Planning Board, Portland, Oregon

The Problem

IN JOINING the community, the industry ordinarily provides new capital and plant, new payrolls, new demands for local goods and services, and new connections with outside markets—in short, new economic activity. The community, considered as a whole, contributes economic and social facilities and services. These include such physical and economic items as land, water, energy, labor, materials, linked industries, distribution, transport, other utilities, housing, finance, and market, and such governmental and social items as police and fire protection, and school, health, and recreational services. These elements vary considerably among communities.

The industry seeks the community best suited to its individual requirements—the one that will permit the most effective and economical conduct of its business, that will best meet its major location requirements of site, power, fuel, accessibility to raw materials and markets, transportation, and labor supply. If it looks available communities over with penetrating and far-seeing eyes, it will give careful consideration to other factors more difficult to value in money terms—to the social and economic capacity of the community, to the general environment and its effects in housing, health, recreation, morale, and productivity of personnel. For a defense industry, military factors in location—security from standpoints of accessibility, time and space, dispersion, concealment—must also be considered and may have precedence over the ordinary socio-economic factors.

The intelligent and far-sighted community will know and understand its own economy, its strengths and weaknesses. If it considers its prospective industries wisely and well, it will seek those which will bolster its economy—develop its latent resources, and raise the general level of income, without sacrifice of community health or well-being. The ideal industry, from the community viewpoint, will generate, directly or indirectly, economic activities that will dovetail into the community scheme, diversify and stabilize industrial and employment patterns, provide added outlets for professional and technical skills, increase payrolls and living standards, provide markets for raw materials and supplies, generate other manufacturing activities, provide opportunities for home-owned enterprises, and distribute dividends within the region. The community should also squarely face, at the outset, the liabilities or hazards that may often accompany an industry—water and air pollution, for example. It is likely that solution

of such problems will never be more readily found than prior to, or in conjunction with, establishment of the industry.

The problem of the community—beyond the immediate adjustments necessary in providing site and utilities—revolves largely around the impacts of new population or of shifts of population. The improvements and services needed for people—for their shelter, transit, education, recreation, and so on—are in large part the answers to the major problems of community adjustment.

The rapid expansions of defense industry do not raise problems of a new kind; rather they accentuate these old problems of community improvements and services. But the emergency situation will often permit more vigorous attack than would be possible under normal conditions.

A special concern of the community in its relationship with defense industry is that of relative permanence. The community not only must make its immediate adjustments, but it must be prepared to deal with the post-defense readjustments—the possible transition or conversion of the industry to more normal conditions and requirements, or the possible "laying up" of certain units or plants, and, on the other side of the picture, the conversion, transfer or removal of some of the community facilities, at some time in the indefinite future. In the meantime, particularly if it is a relatively small community, it may also have to look into effects of the transition from a construction to an operating phase. Where temporary community facilities must be used, the community should plan against certain disadvantages—against the tendency of inadequate or makeshift facilities to remain, causing blight or interfering with orderly progress.

Community Maladjustments and Corrective Action

Since, fundamentally, the problem is the more or less familiar one of providing for added or shifted people, the range of difficulties and kind of adjustments needed can quite readily be anticipated. Because of inadequate or changing estimates of prospective employment in defense establishments, however, it has been found more difficult to anticipate the *extent* of need of community facilities. Obviously, in the case of the large defense establishment, new or changed needs will be felt with respect to such facilities and services as land, water, raw materials, energy, fuel, transportation of various kinds, transmission lines, various utilities, housing, schools, hospitals, recreation, fire and police protection, traffic control. In addition, new loads will fall on public finance and on government in general. The actual critical problems are briefly highlighted:

Housing. The need of additional housing is universal in "defense" communities. Shortages are prevalent in both family and single units, and in both low and medium-cost units. There is a widespread demand for rental homes which has grown out of needs of both industrial and

military personnel in defense communities. Dormitories and portable and trailer units are evidently a significant part of the solution, where there are temporary peaks to be met. Rapid housing expansion brings out the need of local planning, and subdivision and zoning controls. Because of the number of agencies in the housing field, improved coördination is an urgent need.

Transportation. Problems of access to defense establishments, traffic bottle-necks and jams have demonstrated the need of improvements involving by-passes, grade separations, bridges, ferries, as well as parking areas and improved traffic control. The need of spreading out the peak load on communities in many cases calls for improvement of roads and equipment so that workers may commute reasonable distances. In a number of instances—particularly where expansion is of temporary character—transportation development has been found to be a desirable substitute for some new housing facilities and auxiliary utilities.

Utilities. The utility problems growing out of new industrial and housing construction are intense in many areas. New building has often advanced far ahead of water supplies, sewerage and sewage disposal facilities. Undoubtedly, many difficulties could be avoided through early consideration of utilities as one of the major factors in planning the location of basic industrial and housing facilities.

Sanitation. Very serious problems are arising out of lags in providing for disposal of both human and industrial wastes in newly developed areas. Milk pasteurization and distribution are serious sanitary problems in defense areas; they might well be considered in the category of essential public utilities. Sanitary inspection and control services are inadequate in many areas because of inability of local authorities to keep up with rapidly expanding demands.

Hospitals and Clinics. Most defense communities face critical situations with respect to requirements for hospital beds and clinical facilities and services. Because of shortages in personnel and facilities, the possible incidence of epidemic conditions is cause for serious concern.

Schools. Local authorities, generally, have not been able to meet quick rises in demand for school facilities in defense communities. Many schools are greatly overcrowded; and inadequate, obsolete or unsafe buildings have been pressed into service. In a number of instances, available community resources have been insufficient, for the time being at least, to meet rapidly expanded operating needs. School surveys have been helpful in measuring conditions and needs, not only with respect to schools, but with respect to housing and other works and services.

Recreation. Existing recreation capacity is greatly strained in many defense towns; new facilities and services are urgently needed. Defense industry expansion has added to the problems. In a number

of cities where military concentrations are also involved, needs are especially acute.

Police and Fire Protection. Needs have outstripped services in many areas, because of new industrial and housing construction, and general expansion. Many newly developed areas needing protection are beyond ordinary limits of existing city services. Very acute traffic control problems have put new burdens on city, county, and state police officers.

Finance. A serious over-all problem of each rapidly expanding community is that of financing needed improvements and services. Small communities generally, and even some of the larger communities, are lacking in financial strength or are otherwise unprepared to meet the critical needs outlined. While revenues may be increased by new economic activities there are serious time lags in the growth of ability to meet financial needs in connection with new capital improvements or even, in some cases, expanded operations. The need of state aids has been recognized in some States. For example, Washington has recently enacted legislation providing for some aids in connection with schools, roads, and utilities. The need of Federal aid has also been recognized as essential in present or proposed programs for housing, community facilities, and roads. Outside aid for communities is especially necessary in connection with expansion that is of a temporary nature. Formulae are needed for some definition of relative responsibilities and for local, state, and Federal coöperation.

The economic and social costs of community maladjustment are sufficient reason for concerted action toward meeting such community problems. In many critical areas, success in the defense program depends to a considerable extent upon such action.

Under present conditions there is serious need for each community to determine upon method and program for meeting critical needs. It is necessary for the communities to inventory requirements as accurately as possible, to estimate costs, to prepare programs, and to explore the available resources of finance and organization both within and without the community.

In all of these problems of adjustment and development careful surveys are necessary if conditions are to be met in time and without serious error. Because of the nature of the problems, these surveys should be made on an areal or regional rather than a town or city basis. Some kind of over-all planning for critical areas and the included communities is indispensable.

The Place of Planning in Community Adjustment and Development

The communities that have learned most about themselves and their possible future development are best equipped to meet the problems of new industrial locations.

It is patently too late for the great majority of our communities to reap the advantages of *established* planning in advance of the present emergency—since only a minority of our towns, cities, and counties have a background in planning and zoning, or even in the systematic finding and organization of facts.

The community planning involved in industrial location covers the full range of community functions and problems—the community economy in general, its people, its land use, transportation, terminals, housing, schools, and recreation. Maps and other basic data for these fields should be ready for use. Site surveys, maps and data sheets prepared by a number of Pacific Northwest communities in coöperation with the Bonneville Power Administration have proven of value in connection with new industrial locations in that region. In emergency times, particularly, problems of administration, engineering, labor, and finance, also call for special over-all planning attention.

To be most effective, community planning must cover not only the city or town, but the tributary or related territory. In the location of large industries in an area of small towns, planning is likely to involve a number of communities and, in such cases, a *regional* community must be envisaged.

In defense situations added difficulties are placed on the community planning commission. The whole planning process is—or should be—intensified, greatly speeded up, and more closely related to action. Many separate plans must be quickly synthesized.

In relation to the community defense council, or other coördinating group, the ideal planning board functions are those of a research, planning, and advisory agency. As indicated, it will have to advise with respect to community development, and often in problems beyond the more traditional range of community planning—as to financial plans for example. Under the pressures of a defense program, the technical resources of a good planning board are indispensable to the community.

In conjunction with other communities and agencies concerned, the community planning board should play an appropriate part in establishment of suitable organization for coördinated planning for the whole defense-affected area. There is no universal prescription for organization and procedure of such area planning bodies. A very high degree of coöperation, however, is essential. The area planning agency must maintain close contacts with the industries, with the defense agencies, the state departments and planning boards, and others. Properly to exercise the functions of planning and of liaison, it must have competent executive and consulting staff assistance.

The essential objectives, policies, and features of an area plan should be developed as rapidly as possible. There should be made, without delay in defense areas, a determination of the interrelationships of industries and communities, estimates of the permanent and temporary

industrial facilities and of corresponding personnel requirements, and plans for the construction, financing and amortization of the public improvements necessary to permit the effective functioning of industry and community. The planning agency should constantly keep under consideration the probable post-emergency readjustments of both industry and area.

Conclusions

From the community viewpoint, establishment and implementation of community—town, city, county, regional—planning boards is essential for proper integration of industry and community. Community planning is indispensable in defense areas.

State and Federal aids to the establishment and effective functioning of planning boards in critical defense areas are necessary and desirable.

Consultation, with local planning agencies, by industries and by Federal and state departments concerned with location and layout of industrial and other defense establishments, is advantageous from both viewpoints and should be general practice.

Local or regional defense councils should be established in a number of critical defense areas to aid in coördinating and expediting interrelated programs and to simplify and otherwise improve liaison within the complex of agencies concerned. The machinery for coöperation as well as the will to coöperate is at the heart of effective defense effort.

Local or district planning boards should have a definite technical-advisory relationship to such defense councils.

The Federal Government should round out policies and machinery for extending appropriate aids to communities for construction of public improvements, and for other programs essential to effective operation of defense industries and military establishments. Urgently needed, and generally beyond the capacity of local communities to provide in time, are programs for housing, transportation, schools, and a variety of other community facilities.

Formulæ should be worked out for equitable division of responsibility for and cost of such programs, particularly in connection with facilities of an emergency character.

In the interest of order, stability, and security—national, regional and community—efforts should be continued toward formulation and effectuation of policies for the improvement of patterns of distribution of industry through corrective location of new industrial establishments and increments.

Policies, principles, and plans should be developed for industrial locations, looking toward mutual advantage to industry and community, toward the rational use of economic and social capacities of areas and communities as well as the meeting of industry and defense needs, and toward the amelioration of overconcentration, congestion, dislocation and needless migration of industries and people.

Discussion

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IN THE Pacific Northwest, although no definite attempts are as yet being made to provide basic conditions that eventually might permit industrial locations in terms of their social implications, at least Northwest Governmental agencies are aware of the problem and are talking about it to various groups.

For the first time in the history of the Pacific Coast, and to some extent, of the Nation, large quantities of low-priced power are being made available from a regional power network, and under rate conditions that avail this power to the large industrial consumer at basically the same low rate throughout the area, regardless of distance from source of generation. Of course, the so-called "postage stamp" rate and the "kilowatt year" rate of the Federal power system in the Pacific Northwest are not new concepts. However, this combination, with tremendous existing and potential sources of hydroelectric power and an extensive interconnecting regional network, form an instrument of particular significance in affecting the economic structure of an area such as the Pacific Northwest, whose industrial development is still in its infancy.

Inasmuch as the Pacific Northwest lacks basic industries, without which balanced industrial development is impossible, the requirements of these should be considered first. Linkages of feeder and secondary industries then can be expected to follow the nuclei patterns established.

The experience of the Bonneville Power Administration to date points rather definitely to three major location factors. These relate to the availability of raw materials, of transportation for raw materials and for finished products, and the influence of local taxation. The latter is more a reflection of local anxiety than of fact.

The types of basic industries now attracted to the Northwest principally by power availability, and potential power reserves, are those of an electrochemical and electrometallurgical nature. Their raw material requirements, essentially of mineral base, are extremely varied both as to quality and quantity. In normal times, much of these raw materials are obtained from foreign sources. Today, emphasis is obviously on domestic supplies wherever these may be found.

The commercial mineral resources in the Northwest are generally undeveloped. The situation springs from earlier emphasis on precious metals and the great difficulties in making adequate geologic surveys. The definite change in emphasis by the prospector and in the vegetal cover of mineral zed areas due to the rapid destruction of the forests, along with other intrusions of civilization, is revealing more clearly the extent of mineral deposits. However, from a utilization point of view, the prospective industry is not often acquainted with the region's

mineral resources, and the region, conversely, is not aware of the industry's requirements.

As a consequence, new industries in the Northwest have sought what might be termed compromise locations: within reach of local resources, and of oceanic transport facilities for supplemental and peacetime imports. Similarly, at present, the greater portion of the finished products of these industries are shipped for fabrication or utilization to eastern manufacturing centers and markets.

This situation places immediate emphasis on tidewater locations for industry, to which intercoastal and oceanic commerce may have easy access. However, the multi-purpose development of the Columbia River is providing a deep-draft navigation channel which at present extends to a point 187 miles inland from the Pacific Ocean. This is supplemented by barge facilities for part of the year extending as far inland as Lewiston, Idaho, a total distance of 465 miles from the coast. Obviously, for industrial locations requiring access to navigation facilities, the coastal strip extending from Puget Sound to California is thus supplemented by a strip extending along the Columbia River to the Inland Empire. Gradual development of the Columbia Basin Project, with its 1,250,000 acres of lands to be irrigated by Grand Coulee waters, and the resulting new centers of population, will have some influence.

These factors, and their trends, are anticipated in the Federal power network now being constructed and expanded in the Northwest.

The relationship of industrial location to community development has been keenly appreciated by the Bonneville Power Administration. In its basic effort to be of assistance in bringing about a more rational utilization of the region's resources and a more balanced economy, the Administration is being looked upon with increasing emphasis as a general regional clearing house of information for industry. In this endeavor, communities are constantly approaching the Administration for guidance in their individual efforts to attract industry. This situation raises critical problems of policy in that although the Administration wishes to be instrumental in planning proper community development, at the same time it does not wish to impose arbitrary direction in any way. As a consequence, a continually expanding program of consultation and coöperation has been instituted between local community groups, state, county, city, and regional planning agencies, and the Administration.

These coöperative industrial site studies have three values: one, to assist the prospective industrialist to analyze, on an initial basis, the plant location factors of the area; two, to assist the Administration in gauging possibilities of industrial location, and hence in its planning the disposition of its transmission network and delivery facilities; and three, to permit communities to gauge their problems as compared to those of other communities, and to plan accordingly.

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WE IN Pennsylvania are particularly aware of the problems which Mr. Bessey has outlined since we are a highly industrialized State and have received, up to April 15, 1941, $1,043,623,439 of defense orders, or approximately 9.1 percent of the defense orders placed thus far. These defense orders are not an unmixed blessing. Although regretting the world conditions which have necessitated this defense program, the defense orders have, of course, greatly aided us in at least partly eliminating our unemployment problems. Unfortunately, however, the defense orders do not of their own accord go into the regions in which we have our greatest unemployment.

We have been studying industrial trends in Pennsylvania for a number of years. Early in our State Planning Program we realized that State Planning could not be limited to the consideration of the physical developments of our State and that we must study with equal care the economic conditions of all parts of Pennsylvania. Obviously, planned progress in the physical development of our State could not take place unless our industries were flourishing and our people were employed. We, therefore, began some years ago studies of industrial conditions, including localization and migration of Pennsylvania industries. When, in 1939, the State Department of Commerce was created and the State Planning Board was made a departmental board in that Department we, of course, continued these industrial studies and increased the emphasis we had been placing on them.

Fundamentally most of our current problems in regard to community maladjustments are due to population shifts. In the places where our people have been living, they are housed, although some of them very poorly; they are provided with schools, water supply, sewerage facilities and other services required for modern living; or at least we hope they have such facilities. But when they move to find employment or for any other reason, then new problems are created. Obviously, it is desirable in most cases to keep them where they are now.

In Pennsylvania we have been working for some time on the industrial problem of providing employment where people are. We are trying to avoid the necessity of plant expansion in a community where there is no idle labor as long as there are other communities in which there are vacant factory buildings and unemployed workers. Of course, this cannot be done in every case, but wherever possible it should be done, and in Pennsylvania is being done. We hope by this means to avoid some at least of the increased local planning problems we would have to face otherwise.

The first step in this program of the Pennsylvania Department of Commerce and the State Planning Board was to secure as complete an inventory as possible of idle factory buildings. This information was

secured through local chambers of commerce, trade associations and and leading real estate agents, as well as from the public utility companies and the railroads. Whenever the Department of Commerce or the State Planning Board receives an inquiry as to a suitable location for a particular industry, this inventory of idle industrial property together with information in regard to available labor supply, housing, public facilities, sources of raw materials, locations of markets and other pertinent data from our files is used in an effort to select a site for the industry which will benefit not only the industry but also the community.

Another method of attack is the development of the industrial pooling plan which has been established in thirty-six industrial areas in Pennsylvania through the efforts of the Department of Commerce and the State Planning Board. This pooling plan, which originated in York, Pennsylvania, will utilize to the fullest extent possible our industrial resources, men, tools, and buildings. As you know, when a factory has taken all of the orders it can handle there are almost always some machines which are being utilized only part of the time. If the productive capacity of all these idle or semi-idle tools in a whole industrial area is added together, the area can handle additional orders. Under the pooling plan, which is working in Pennsylvania today, the industrialists and leading citizens in thirty-six regions have voluntarily organized, and maintain a running inventory of current idle hours of machines and men. Plant managers in immediate need of stepping up production through subcontracts can find out immediately where suitable productive capacity is available. The Department of Commerce and the State Planning Board are assisting in the interpool clearance of lists of currently available production facilities and are also clearing information between the order placing agencies of the Federal Government and the local pools.

This pooling plan is really working and we feel that it will be an important factor, not only in speeding up the defense program, but also in avoiding as far as possible the necessity for population shifts.

Unfortunately, we do have major problems in some parts of Pennsylvania, which are occasioned by the construction of new factories in areas where workers are not immediately available, and where housing and other facilities will have to be provided. In these cases community planning is indispensable. Some of these developments are located in areas where the present officials have no conception of the difficulties ahead of them and, therefore, refuse to take action until the problems become acute—very often too late to avoid the difficulties which the planner could foresee. It is not sufficient to *offer* state or Federal aid in the establishment of planning boards in critical defense areas. Frequently these offers of aid are resented as another interference with "home rule." We need some legislation whereby the State can step in and do the necessary planning and zoning if local officials do not take suitable action.

HARRY D. FREEMAN, Planning Engineer, Planning Commission, Portland, Ore.

IN THE good old days of normalcy, the first news that planners had of new industries was through the newspapers. Locations were determined largely by land speculation in "partnership" with a system of taxation which led to an uneconomical spread of industry. The payroll view of industry tended to obscure other views. Some cities resorted to tax exemption and to free-site propaganda in an effort to bolster their payrolls. This "Pike's-Peak-or-Bust" method has tended to black out sound considerations.

It has been clearly demonstrated that industrial location is highly involved. All of us have deep sympathy for the prospective industrialist in search of information which must come from many sources—the port authority, realty board, dock commission, the railroads, chamber of commerce, city, county and others. Forgetting tax reform and related public policies for the moment, let us say that the industrial system of a city is as important, from a planning standpoint, as the school system of a city, or the transportation systems, and that communities should, where conditions warrant it, take the initiative in preparing adequate industrial information and in initiating adequate public works for the purpose of preparing industrial sites and in obtaining an economically desirable industrial pattern.

Localities and the Federal government have had to take the initiative in providing emergency housing for defense workers because private enterprise could not be expected to invest for an unknown period. Can we expect private enterprise to speculate in preparing industrial land where substantial dredging and filling costs are involved? The conditions surrounding industrial land in Portland are similar to those in many cities, no doubt. There is one area of about 1,000 acres, which was prepared for industrial use in 1925, with the aid of the Port of Portland authority. Private parties held much of this land at a high level of value thus discouraging industrial use. Today, however, some of this land is coming into public ownership because of tax foreclosures. Now that speculative losses have been taken, the city and county can coöperate in establishing reasonable levels of value with the objective of putting this excellent industrial area to its rightful use. It is doubtful that private enterprise, even with subsidy from the Port, will again speculate in developing such an area. This statement assumes more weight when we recognize that we have about 5,000 acres of potential industrial area. Hydraulic fill and other grading is required on all of it. It appears that a logical procedure would be for public authorities to guard the industrial problem as they do the defense housing problems. Industrial sites should be planned in advance and prepared as needed. The Port of Portland is now studying such a procedure in order that we may be prepared in

advance and that we may not proceed blindly. Haphazard location of heavy industry is to be avoided under this plan. It is certain that we, the public, will take the loss for preparing industrial land, but this subsidy will not be misplaced if it results in lands being properly used.

There are constitutional and statutory problems involved in this question of gaining public control of industrial locations. Perhaps we can use present conditions as a wedge to open the way to public understanding and action.

We have been fortunate in the Portland area in recent industrial locations. We have located permanent and temporary industries in logical places. We want additional payrolls as other cities do, but I believe that most of our people and particularly realtors, public officials and others, do not believe in a policy of payrolls-at-any-cost. In this attitude there is sympathy for the manufacturer as well as for the community. It is unfair for a city to mislead an industry and it is equally unfair for an industry to mislead a community by playing on the payroll faction, or by asking for unreasonable favors such as free sites and other grants.

In the present emergency, defense industries must be fitted into present concentrations of skills and equipment because speed is necessary. Solving the deep problem of distributing permanent industries in accordance with economic and social need is a task which lies ahead.

When the national industrial pattern has been pictured, the cities still have the job of precising the pattern as it related to them. And this is no easy task. Those of us who are in the trenches, and who are aiding in the administration of city planning schemes, are faced with the need of more control in the placement of industry. A zoning ordinance map does not provide the sort of control needed. This map cannot show where new industries may go, progressively. Control by public ownership of land, through tax foreclosure, is only a by-product of a faulty system of taxation. In short, it is only a windfall of a speculative process. New industries, like new subdivisions, are accretions on the city map and they deserve guidance for the general welfare.

In this discussion on industrial locations we have emphasized long-time policies. Our points of view will be sharpened by reference to Volume II, *Urban Planning and Land Policies*, released as a supplementary report of the Urbanism Committee of the National Resources Planning Board. For example: "Every plot of ground not put to, or reserved for, its most appropriate use constitutes in effect so much of a drag upon national urban development." The report states, further: "The central problem is that of developing a concept of urban land as fundamentally different from other commodities and as having vital importance to community and national welfare out of all proportion to its dollars-and-cents valuation."

The Neighborhood—Key to Urban Redemption

HARLAND BARTHOLOMEW, City Planner, St. Louis, Missouri

FOR nearly a century this was predominantly a rural Nation. Most of our parents or grandparents were farmers. On these farms they constructed modest, substantial houses. Around the homes trees were planted, flowers and occasionally a lawn. This represented the good standard of living. The character of the house and its environment varied according to geographical location, the character of the district, and the taste and the economic status of the owner. This standard became so well established as to become a fixed tradition. A standard of life, long proved to be sound and satisfactory, can withstand the strong disruptive influences of profound social and economic changes, and will not die until something better can take its place.

As our people left the farm, they brought much of the rural standard of the home and its environment to the villages of New England and to the small towns of the Middle West and South. As the villages and towns grew to sprawling cities, social and economic conditions changed. Both homes and lots grew smaller. The influx of certain European groups having a background of more crowded urban life and a low economic status, encouraged the building of crowded houses and multi-family dwellings. For a time, at least, we seemed to accept congestion as a necessary concomitant of urban life. Our long-established native living standards and instincts remained strong, however, and persons of ample means soon withdrew to the edges of the city, purchased larger lots, and continued to erect individual houses with more open space, trees, lawn and garden.

There was no monopoly on this withdrawal. Land at the edge of the city is always cheaper than at the center, and soon increasing numbers of people sought a more open, more pleasant living condition than was possible in the congested central areas of the city. The builders of multi-family structures recognized the universal desire for good environment characterized by openness and greenery. It was easier to locate these multi-family structures among the single-family dwellings than to create their own standards of open space. They soon proved to be unwelcome guests, however, for they brought traffic and other disturbances. They represented the congestion of the city, which occupants of homes were seeking to escape.

Deed restrictions were written to protect the single-family dwelling districts from invasion by other types of buildings. Entire blocks of homes, and even large subdivisions comprising many blocks, were thus restricted. The protection was short-lived, however, for restrictions expired in twenty or twenty-five years and were seldom renewed.

Restricted areas were seldom large enough adequately to assure permanently good environment. The CITY was overwhelming them.

Next came zoning with its promise of protection by dividing the city into districts—some for homes, some for multiple dwellings, some for stores, and some for industry. But it proved difficult to protect areas of sufficient size, even by zoning. Because of legal uncertainties, exaggerated ideas of growth, and the pressure of speculative interests, zoning was seldom genuinely comprehensive or in scale with actual needs. Districts for industry, commerce and multi-family dwellings were made altogether too large, and districts for single-family dwellings were made too small. City Councils frequently yielded to speculative pressure, and by changes in zoning, the single-family districts were still further reduced in size and in desirability. The race to the edges of the city proceeded at an accelerated pace.

In earlier days this attempt to escape the city was slow and almost imperceptible. Gradually the pace quickened until the advent of the modern, high-speed, low-priced automobile suddenly made possible a spread of population over areas eight or ten times greater than the existing city. Almost as suddenly came an amazing cessation of urban population growth. Now it appears that this is a permanent, and not a temporary condition. Thus the average American city now finds itself caught in a perplexing predicament. In most cities, population has already spread over an extremely wide area, and yet it continues to scatter. There is insufficient new population to justify unlimited expansion or to absorb the older central areas. The American city escaped the characteristic congestion of European cities, but has apparently gone to the other extreme of decentralizing beyond the ability of its citizens to finance the great structure of public improvements needed to service a vast decentralized urban area.

The American city is now face to face with the dual problem of curbing uneconomic and unjustifiable further expansion on the one hand, and of discovering how to redeem abandoned or depressed older areas.

For many years, up until about 1910, most cities expanded their corporate limits to embrace new growth. In recent years when urban areas were expanding most rapidly, corporate areas were not expanded with corresponding rapidity. This was due to the characteristic inability of government to respond quickly to changing conditions. Numerous small municipal corporations were organized in the suburban areas. The tremendous problem now confronting cities is made doubly complex by divided administrative policy. It is difficult to conceive of any adequate solution of the problem of urban redemption with comprehensive planning of entire urban areas implemented by unified administrative control. Something definite and something vigorous should be done in this direction.

In our cities today we see decadent neighborhoods infecting adjoining neighborhoods which in turn become decadent and infect other neighborhoods until much of the city's structure is impaired in value and in usefulness. If we can create and maintain permanently sound and stable neighborhoods, we should be able to assure the well-being of the city. This is not to say that a city is merely a collection of neighborhoods, nor that a good city is simply an aggregation of well-planned neighborhoods. What is meant is that we cannot have a well-planned, properly functioning city without good neighborhoods throughout all of the city's structure.

If we can accept the previous statement that the universal desire of our citizens is for a good home in a satisfactory environment, and that all forms of urban dwelling construction should be so designed, we should have neighborhoods in which either single-family homes, or two-family dwellings, or multi-family dwellings may find a satisfactory environment, either singly or in well-planned coördination with each other and with store groups and other service needs. These neighborhoods should be so arranged as to produce individual and collective harmony and stability, rather than the all too prevalent continuous conflict leading to ultimate disintegration of the whole group.

One of the valuable things we have learned from our current form of urban growth is that certain small suburban communities have succeeded rather well in creating a stable and satisfactory environment for homes. These communities of from 5,000 to 15,000 population are in reality a neighborhood or group of neighborhoods. They have developed because the same degree of protection and stability could not be secured in the big city. Good zoning plays an important role in these communities. Speculative interests cannot here obtain abortive changes in the zoning plan. The voice of the neighborhood is the voice of the city in this instance, whereas, in the large city the voice of the neighborhood is inarticulate or ineffective. There are many reasons for this latter condition, familiar to all of us, but they are reasons based on bad practices that will yield to more careful planning. Our large cities must help their citizens to protect their environment, to improve it and to become effective allies in combatting the disease of blight and disintegration. The neighborhood is the unit through which to work. If this cannot be done, we shall surely witness further decentralization, more small suburban cities and greater areas of slums and blighted districts in the large cities.

This is said with the full knowledge that there are public administrators and others who hold contrary views, who believe that efficiency and economy depend solely upon strong central government and control. They believe that any form of division in the unity of the political structure will lead only to conflict and disruption. The matter warrants much further study and discussion. There would seem to be

less cause for concern than supposed if there is an intelligent and sympathetic approach to the problem.

The division of the city into neighborhoods and the encouragement of local initiative in dealing with local problems, especially those related to protection of environment, does not necessarily involve impairment of the structure or efficiency of government. It could be so organized as to strengthen the government. There can be no sound municipal government without sound neighborhoods. The Waverly Neighborhood project in Baltimore in no wise interferes with the structure or efficiency of municipal government. The Roland Park development in Baltimore and the Country Club area in Kansas City, Missouri, are definite neighborhoods, privately sponsored and developed, and are not handicaps to efficient municipal government. Only by widespread encouragement of good neighborhoods can we hope to make possible sound and solvent municipal government.

It is impossible at this time to write a formula for the neighborhood. This is a new and untried field and there must be experimentation of various kinds. In slum areas, whole new neighborhoods must be reconstructed as single undertakings. The Federal government has demonstrated that this can be done in some of its low-cost housing enterprises. Here, also, is a fertile field for private enterprise. It is far too big a task for government. It should not be assumed, either, that there is necessarily any relationship between large scale reconstruction and low-cost housing.

In suburban areas about the larger cities, good neighborhoods of single-family homes have developed and have learned how to protect themselves quite satisfactorily, in many instances, through the device of small local governmental units and good standards of zoning. It is conceivable, even here, that large scale construction and private enterprise may also prove desirable and successful. The Metropolitan Life Insurance Company's project, "Parkchester," in the borough of the Bronx, New York, is indicative of the possibilities in this field, even though there may be differences of opinion about the wisdom of tall apartment house construction and high population density in outlying areas. There is no good reason why private enterprise could not develop, as one undertaking, a complete neighborhood of single-family detached dwellings in a suburban area.

In the vast blighted areas of the large cities, which lie between the slum areas and the better suburban districts, the matter of developing good neighborhoods is more difficult and more complex than the reconstruction of the slums or the establishment of a good, small suburban village. Here, the value of land and buildings is such that the time for reconstruction has not arrived, and will not come for another twenty-five or forty years. On the other hand, existing conditions, and political conditions, are such that good environment cannot be

secured as easily and as satisfactorily as in a suburban community. Much study and experimentation is needed as a means of rehabilitating blighted areas, because they constitute generally more than fifty percent of the total urban area.

If we wish to plan good cities, it is not enough to devise a good framework composed of major streets, transportation facilities, park and recreational areas and public buildings. We must also plan for the most appropriate and desirable use of private land within this framework for the population which presumably will use the streets, transportation facilities, parks and public buildings. Zoning has failed to achieve this end. Zoning is regulatory rather than directory. It is futile to plan the city and to make vast expenditures for public improvements where the population is shifting constantly. Our next major problem in city planning is to make cities attractive, to invite stability of population by assuring genuinely good environment and by curtailing those practices which interfere with it. The neighborhood is the unit through which we must work. It takes very little imagination to foresee a virtual renaissance of our cities through neighborhood planning—not singly conceived, but as integral units of the comprehensive city plan.

Neighborhood Planning

SEWARD H. MOTT, Director, Land Planning Division, FHA, Washington, D. C.

FROM its inception the FHA has recognized that the quality of the neighborhood is one of the main factors of risk when insuring loans on residential properties. It realizes that sound neighborhoods do not "just grow," they must be created through intelligent planning. The FHA, therefore, established a division of planning technicians to protect its interests and those of the public by assisting developers in planning complete communities of homes instead of just subdivisions of lots.

Selling this program of neighborhood planning to the thousands of real estate operators and financial institutions throughout the United States has been an accomplishment of national importance. It was brought about, first, because a method of financing homes was established that made it possible for the man of small income to buy a good house and lot for a small down payment and pay for it monthly on terms comparable to rent and, second, because the Administration was able to convince the developer that good planning paid.

In six years this program has changed the entire real estate market. The speculative sale of lots as we knew it in the past has practically disappeared. The subdividers have become homebuilders. The best proof of this is the real estate page of any metropolitan paper. Homes

are being offered for sale, not just lots alone. This change of emphasis certainly will have a revolutionary effect on the growth of our cities. Land now is being plotted only as fast as the need for homes is evidenced. Street improvements are being installed by the developers as the homes are built, and the taxes to properly maintain these improvements are collected by the bank along with the regular monthly payments.

There is no delinquent-tax problem with homes financed this modern way, and our cities are just beginning to wake up to the many benefits that this program of neighborhood planning and financing is bringing them. Mr. Cornick's study of the financial structure of cities in New York State showed clearly that one of the major reasons for their financial troubles was the carrying of huge burdens of bonds created to finance the improvement of thousands of acres of unneeded and unwarranted subdivisions. As there was no need for these lots as home sites their false speculative value soon collapsed, the delinquent taxes piled up and the bonds defaulted. With a continuance of today's methods of neighborhood control and financing this condition should never return.

Today, we are facing a housing emergency and many are wondering if we can hold the gains that we have made and which are just becoming evident to the student of city growth. Our two greatest dangers are: The need of speed which, to many shortsighted but well-meaning individuals, means that we do not have time to spend on planning; and the fact that we are entering a seller's market. In many areas any sort of house will sell and in most any location and the developers are beginning to realize that high quality is no longer necessary to attract buyers.

Fortunately the FHA is not set up merely for the emergency; its policies are based on long-range factors. It is also conscious of the fact that one of the reasons for its creation was to improve housing conditions. Because of this, even the defense homes which are now being built under a special amendment to the Housing Act must meet regular requirements as to construction and location.

Most cities have some sort of zoning ordinance and some degree of subdivision control. We find the areas outside the city limits and under county control the most serious problems. Zoning, subdivision regulations and even health ordinances are frequently missing and a surprisingly large number of States have no enabling legislation permitting counties to plan or zone.

I do not belong to that school of thought which feels that unless a complete and comprehensive planning set-up can be secured it is better to have no city planning at all. The planners in my division are taught to work with the tools in hand, to demonstrate the benefits of the simplest type of control, and to use this as an entering wedge to secure more complete planning legislation.

We have found that the best way to solve a neighborhood planning problem is to be fully familiar with the conditions environing that particular neighborhood. This calls for the decentralization of the technical staff and for the individual application of broad principles and objectives rather than of narrow standards and regulations.

Whenever a request for the approval of a residential development is received, the procedure is as follows. First to be considered is the effect of the new neighborhood on the community and of the community on the new neighborhood. Is there a need for the development? Is the price range right to fit the need?

Will the character of the existing neighborhood be raised or lowered? These are questions to be answered by the Land Planning Consultants, by the experienced men in the local insuring offices and the market analysts.

Next come more detailed considerations. Is the location properly situated in relation to transportation, employment, schools, parks and shopping centers? Do adverse conditions, such as uncontrolled adjoining properties, undesirable approaches, traffic and other hazards exist? Then the physical conditions of the property are checked, its topography, drainage and soil. Information is secured as to the adequacy of services such as sewer, water and street improvements (including the method of their maintenance and the tax burden). The protection to be provided through zoning or deed restrictions is looked into and finally the proposed land use and the layout of streets and lots is carefully studied.

When it is evident that the project is unwarranted and unneeded, it is rejected by the local insuring office, without further processing. If it looks promising, the Land Planning Consultant in coöperation with the local office then outlines certain requirements or objectives that must be met before the area can be considered eligible for mortgage insurance. These requirements cover a wide range of matters, from physical improvements to financial details, and rough sketches are often made to assist the project engineer in understanding the revisions required.

Before discussing the other requirements I will outline certain site planning policies which we established some years ago and, although recommended by planners for many years, had not previously been generally accepted.

One of the most difficult site planning problems is the use of frontage along heavy traffic arteries. In the past, largely because our city officials did not know what else to do with it, such frontage was planned and zoned for business or apartments creating a terrific surplus beyond any imaginable need. This has resulted in miles of vacant land on the main highways leading into our cities, or in the mushroom growth of ugly, temporary, hot-dog shacks, auto graveyards and similar unattractive uses. To salvage this frontage and to decrease traffic hazard by the elimination of unnecessary intersections we are having developers follow

one of the following schemes. First, back deep lots against the trafficway with a uniform planting strip along their rear line adjoining the highway. The houses face a parallel residential street and all driveways enter from the front, not the rear. Blocks are long, 1,000 to 1,200 feet, so as to create as few intersections on the highway as possible. Where this type of planning has been adopted by the city or county, as it has in many areas within the last year, notably Los Angeles County, we recommend that uniform planting material be required on both sides of the highway. This affords a most pleasing effect.

Another method we recommend, which is becoming popular on Long Island as well as in other areas, is to place a 20-foot planting strip along the sides of the highway. Behind this is located an 18-foot road on which the houses face. Generous setbacks are required so that the homes are protected from glare and noise, and very acceptable sites are provided. Intersections into the main highway are carefully controlled at intervals of at least 1,000 feet. In both treatments, individual driveways do not enter directly onto the traffic artery—a source of frequent accidents.

Several cities in which we have used this treatment have re-zoned such frontage from commercial to single-family homes at the request of real estate operators—a most surprising and significant action.

The superblock treatment with a multitude of cul-de-sacs protruding toward and entirely surrounding a central park area has not proved practicable. The cities object strenuously, claiming that the cul-de-sacs are traps for fire apparatus and large trucks and that they are very expensive to service, as garbage and trash collectors, as well as all deliveries, must always retrace their route. We find it difficult to set up community associations to maintain the private park areas, especially in low-cost projects; and interior parks entirely surrounded by residences will seldom be accepted for dedication by the cities. The cost of installing utilities and street improvements as well as the great amount of walk necessary in the cul-de-sac, superblock plan is considerably greater than in the more conventional treatment. It is our experience that public parks can be placed in the interior of an exceptionally deep block if surrounded on not more than two-thirds of its exterior by private property. We find that the average American wants a larger lot, with publicly maintained parks nearby, rather than a small lot with large areas of community land, for the maintenance of which he must pay a special assessment over and above his regular taxes. Short loops rather than the dead-end cul-de-sacs appear to solve the problem in many cases. These provide necessary circulation with a minimum of traffic hazard. This does not mean that cul-de-sacs are taboo. They are useful to work into odd corners or up steep grades. They are but one of many planning tools used by the experienced technician. The saw is useful to the cabinet maker, but he does not use it to the exclusion of all the other tools in his kit.

Four-corner intersections are avoided, where practical, and "T" or "Y" intersections used, to decrease traffic hazard through the reduction of speed and of collision points. Retail store groups at mile intervals are considered satisfactory and sufficient space is set aside, if needed, to provide generous parking, screened with planting strips, walls or fences. Location of the stores directly on the street, with parking space in the rear, is becoming popular, as more pedestrian trade is picked up. Entrances and exits from parking areas must be very carefully planned to avoid congestion.

A right-of-way width of 50 feet for minor residential streets is now fairly standard all over the United States, with paving widths of 24 feet, providing two seven-foot parking lanes and one ten-foot moving lane. For major residential streets, a 60-foot right-of-way with 34-foot paving provides for an additional 10-foot moving lane. This standard is quite general. When lots are 100 feet or more in width and the density per net acre low, we allow paving widths down to 18 feet but do not permit high curbs. With the residences so far apart, street parking is no great problem.

Fifty by 100 feet is the standard-size lot for low-price properties in the north. We have but little difficulty now in securing lots of 60 by 120 feet in the south where bungalows are used and more air and ventilation are needed.

Other requirements cover a list of protective covenants which usually include a provision for approval of exterior design by an architectural committee. Covenants covering minimum square foot area of the house and of the lot are standard as well as the usual side yard and setback restrictions. In all of our forms we use the term protective covenants instead of deed restrictions because of its psychological effect. Lot sizes are carefully regulated and health approval required when septic tanks or wells are used. Paving construction with road cross-sections that meet standards set up for that particular locality (many times by our engineers), are minimum requirements. There must also be assurance of proper street and utility maintenance. We have been instrumental in securing county maintenance in many instances by requiring the sponsors to put in better improvements and by coöperating with the county in keeping the homes fairly closely grouped. A minimum of eight houses to 1,000 feet of road has been the agreed grouping in several cases. By grouping the houses in this way sufficient tax revenue is secured to cover the maintenance costs. Here again the assurance that taxes will be paid on time is the big factor in securing the coöperation of local authorities.

Not all of the projects processed are in new areas. Three years ago approximately 60 percent of the subdivisions presented were old tracts, many times partly sold out and partially improved. The best of these have been rehabilitated, cut into bigger lots and assimilated so that last

year only 30 percent of the subdivisions we processed were old tracts. Many were, of course, rejected with the recommendation that they be turned back to farm land.

Today the demand for FHA financing is so great that one will very rarely find a new residential neighborhood that has not received the FHA's analysis and blessing. Close to 3,000 prospective residential neighborhoods a year are being analyzed by the twenty-five consultants on the Land Planning Staff. These neighborhoods average thirty acres in size, with three and one-third lots per gross acre. There is no evidence here of overcrowding or of the development of unneeded subdivisions.

The consultants hold hundreds of meetings with local officials and planning boards, and carry with them lanterns and slides to demonstrate that neighborhood planning pays. They work closely with city, county, state and Federal highway and health departments and planning agencies.

They have been instrumental in having hundreds of planning, zoning and health ordinances passed, and in correcting conditions that would break down neighborhood quality.

Without these safeguards the new neighborhoods would have little chance of survival and therefore they would not be safe places for long-term loans. It should be noted that the economic rather than the social advantages are stressed. Real estate developers are seldom philanthropists.

A national program moves slowly—sometimes discouragingly so—but with the perspective of six years, quite amazing progress is evident.

Ideas for which we had to fight bitterly are now accepted without question. The banks and the real estate boards are now our most enthusiastic supporters. We have actually created thousands of sound new communities that are the most convincing evidence of the value of neighborhood planning.

Waverly—A Study in Neighborhood Conservation

DONALD H. McNEAL, Deputy General Manager, Home Owners Loan Corporation, Washington, D. C.

THE Federal Home Loan Bank Board, its agencies and their affiliated institutions, have an investor's and guarantor's interest extending into virtually every urban community in the United States and aggregating some seven billions of dollars. Because a portion of this gigantic sum is menaced wherever community decay threatens, the Board long has sought a simple and practical remedy by means of which home-owning groups can anticipate and prevent that social, economic and structural decline which now so seriously menaces vast residential areas. We believe that in the conservation program for the Waverly area of Baltimore we have developed at least a helpful formula which can be successfully

applied to the numerous small home neighborhoods existing in every important urban center, which, though sound and worthy of protection and capable of many years of normal use, are nevertheless beginning to indicate the presence of blight which will eventually drag them down to slum status.

Waverly, first settled in 1830, lies near Baltimore's central business district. It includes 39 city blocks, covering 163 acres, in a tract a mile long by one-third of a mile wide. It grew without planning. Park and playground space is wholly inadequate. Lot sizes and shapes vary, and the lack of proper structural spacing and alignment is obvious. Narrow streets angle and turn and jog and unexpectedly dead-end. Street pictures and patterns are ragged and free traffic flow is considerably impeded. Improper zoning, absence of building line restrictions, bad street patterns and the menace of a slum district immediately to the south of its boundaries add to the problems of the area.

About 7,000 white persons, largely American-born, live within the district. Health conditions are satisfactory, and there is no evidence of overcrowding. Considerable pride of ownership is apparent. General economic status is good. Tax delinquencies are lower than for Baltimore as a whole. Foreclosures have not been excessive. Four out of five families own their own homes.

More than 98 percent of the 1,600 buildings in the area were originally constructed for residential purposes. In room size and total cubage, they are about equivalent to those being built and sold today. Three-fourths of them—erected since the first World War—are modern, well built, well maintained and, of their kind, excellent in architectural and functional design. By lowering the average structural age of the area and by raising its average rating for structural condition, these newer homes have thus far obscured Waverly's gradual but definite downward tendency, and have given its residents a sense of security which actual community conditions do not warrant.

With an occasional exception, the balance of the structures in the area are old, detached frame houses, some dating back 75 years or more. Twenty-six of them were being used for non-conforming purposes at the time of our survey—mostly food distribution. None were in a condition of advanced decay; the majority were in good repair. But approximately 100 of these older structures, located singly and in groups throughout the district, were badly maintained, needed extensive reconditioning and constituted definite danger spots, from which infection was slowly but definitely spreading.

Such were the main features of the picture that emerged from the first—or survey—phase of the Waverly program. In this, as in the second phase of our work, the Board benefited greatly from technical aid and personnel furnished by the WPA, the USHA, the Baltimore

Housing Authority, the Baltimore municipal administration and various civic leaders.

The second step in the program involved the tabulation, analysis and study of accumulated information. Minimum allowable and maximum practical standards for the area were established. Individual properties were studied. Estimates were made of needed reconditioning and its cost. Desirable remodeling was indicated. Sketches of proposed changes were made. These recommendations reflected the highest feasible standards of rehabilitation, consistent with the economic and physical condition of the property, its surroundings, and the maintenance level established for the area as a whole. Estimates were then made of the "as is" value of each property and of the change that might be anticipated in that value when the proposed structural and community improvements were completed.

Detailed studies also were made of street and alley patterns, transportation, installed utilities, paving, traffic loads, parking conditions, planting and landscaping, block pictures, playgrounds and park provision and zoning ordinances. Possible improvement schemes in all of these categories were charted and, in coöperation with the City Engineer and the Plan Commission, tentative long-term adjustments were mapped and scheduled.

Thus, from the survey and planning stages, finally emerged a comprehensive Master Plan for the conservation of Waverly's social and economic values. The equivalent of a surgical operation will not be required. General renovation is neither necessary nor contemplated. The formula for the successful treatment of the area's gradually developing malady, is neither costly nor dramatic. It is a simple, preventive remedy which has aptly been called "Organized Neighborhood Housekeeping." It is composed largely of the ingredients "Structural Conservation," "Street Adjustment," and "Concerted and Continued Community Effort to Maintain a Sound and Attractive Environment."

The specific treatment which the Master Plan prescribed was divided into two parallel, but not necessarily integrated, parts:

Part A included the early physical restoration of all depreciated housing and, thereafter, the adequate maintenance of all structures in the area. Included in this phase of the plan were suggestions for many interior play areas.

Part B provided a long-term community plan. It included improvements in street lighting; amendments to the height and land-use restrictions of present zoning ordinances; extension of public playground facilities; street widening, financed by assessment; establishment of new setback building lines; street widening through the slow, voluntary demolition of old buildings and the construction of new ones back of those lines; and, finally, desirable street openings, closings and adjustments.

Structural rehabilitation, which constitutes the first section of the Master Plan, can be carried forward at the convenience of the individual property owners. The adjustment of zoning regulations and the reform of street patterns, which make up the second step, will require not only the coöperation of Waverly's home owners but also careful adjustment to the over-all plans for future city development worked out by the City Administration and the Plan Commission. As fast as the component parts of *Plan B* are completed, however, they will complement and confirm the benefits which earlier resulted from the completion of *Part A*.

As the third and last step in the Waverly Community conservation test, the Waverly Neighborhood Conservation League was organized. To it were submitted our recommendations for each property and the Master Plan for the entire area. Through this League, the Plan must be translated into the actual physical improvement of the area.

There will be a definite need for similar coöperative organizations wherever conservation efforts are undertaken. It may be found desirable in some cities to place these organizations under the guidance and inspiration of the local housing authority. In others, a municipal department of conservation—established to promote, direct and coördinate neighborhood conservation groups—could be made a valuable and profitable adjunct to city government. A small salaried staff of a city-wide agency could perform a noteworthy service in originating local conservation interest and effort and in continuously maintaining that interest and effort at a high pitch. The monetary cost would be slight as compared with the direct benefit to the city in maintaining its tax base unimpaired, in preserving its social values, in safeguarding itself against the tremendous cost of installing and maintaining duplicate utilities, schools and streets, and in conserving private capital invested in its small homes or loaned on them.

What have been the results thus far of the test? In the beginning, the average Waverly resident was reluctant to recognize the threat of progressive disintegration; was doubtful of the proposed cure; and was slow to admit the need for coördinated effort. Gradually however, as the test progressed, he began to realize that he faces an existing, not a prospective, problem which the mobilized effort of his whole neighborhood alone can solve.

During the past few months, the volume of repairs, modernization and improvements undertaken throughout the area has greatly exceeded that for any like period in recent years. "For Sale" and "For Rent" signs have almost disappeared. Sidewalks and curbs have been installed where none existed before. One of the public and one of the private play areas scheduled in the Master Plan are in process of development. The one house in Waverly for which demolition was prescribed in the Master Plan, has been torn down and the real estate improved with a structure closely following the lines recommended

in our study. New construction has proceeded generally throughout the district at a rate very considerably exceeding that for any recent year. In the northeast section, a tract embracing eleven acres has been replatted so as to reflect recommendations developed during our studies, and the construction of the first group of 95 buildings will be begun on this tract this month.

Perhaps even more noteworthy is the HOLC's own Waverly experience. During the second year of the test program, the number of its paid-in-full loans in the Waverly area nearly doubled, while the ratio of its borrowers in default dropped by more than half. In the 12 months succeeding completion of the survey, the HOLC disposed of over one-half of the maximum number of Waverly properties on its books during that year. This sales record far exceeded the HOLC's record for the State of Maryland as a whole and was also better than that of the four States which comprise the Baltimore HOLC Region.

We believe that this improvement in maintenance, sales and rent market, mortgage payment record and construction volume can be attributed—in considerable measure, at least—to increasing confidence among the residents of the area; that the remedy which has been prescribed is a practical one, and that it will exert a continuing and permanently stabilizing influence on values and conditions in the community.

The future of Waverly now depends upon the action of its home owners. If they make good use of the remedy devised and passed on to them, they can halt the danger which menaces their community and can preserve it as a stable and desirable home neighborhood for many years to come. If the remedy's simple formula is not applied, continued disintegration—gradual though it may be—is inevitable.

There is no single pattern which will solve the problems presented by our cities. But the protection and rehabilitation of existing residential neighborhoods presents a very real and immediate task, the successful accomplishment of which is almost entirely dependent on civic leadership and community coöperation. It is that leadership and coöperation we would like to stimulate and encourage in every city in the United States.

Urban Redevelopment Corporations—A Legislative Victory in New York

ARTHUR C. HOLDEN, Architect, New York City

Part I

THE Urban Redevelopment Law opens possibilities for a new approach to planning. There is now a chance that a plan may be made for a neighborhood, or for the improvement of a specific area, and that the makers of the plan will find themselves in possession of a legal mechanism that can be effectively applied to the execution of the plan. Why is this important?

Anyone who has studied the growth of our American cities, though struck with admiration for the greatness of the task that has been accomplished, cannot help but deplore the extravagance, the uncertainties, the waste, and the unevenness that has characterized this growth. Although we boast of the enterprise, the vitality and the life of our cities, we often hear the expression—the "cruelty of the city." This doesn't refer to the cruelty of the gunmen about whom we read in the newspapers, but to the ruthless competition of city life. Everything that cannot stand up against this competitive fight goes down. Open spaces are lost, trees wither and die, beautiful buildings and settings are destroyed, the ugliness of makeshifts predominates and becomes almost alluring in the compulsion which it exerts.

Because of this fierce competition, things that get done have to be things that can be done in the easiest way. The things which are difficult to do or which are puzzling do not get done. The man with ideas does not address himself to solving difficult problems; at least, not if he expects to survive. He looks for the cheapest land he can find that is usable for the purpose he seeks, and he builds there as best he can. The man who has land or improved real estate does as little as he can with it until he is compelled to act; then he gets the most out of it he can by either selling or putting as much building on it as he is allowed to put.

On its part, the city tries to serve those who cry loudest for help. All of the things that ought to be done are beyond the financial resources of the city, so the city postpones as long as possible and then often has to do less than it ought to do in a way which is more expensive than it ought to be. For example, New York City has had some very difficult traffic problems at the terminals of its great East River bridges. When the upper deck was open several years ago on the Queensborough Bridge, it was found to be virtually impossible to undertake any comprehensive scheme for the Manhattan terminal, even though the buildings and the narrow streets causing the congestion were acknowledged to be obsolete. The best that could be done was for the Borough

President to take a small strip of property running through from 59th to 57th Street, through the center of the blocks, and to utilize this for a separate approach to the bridge without any attempt to rearrange the properties abutting thereon. In this way the cost of acquisition through eminent domain was held down. Traffic was benefited, but no general step was taken toward improving the general blighted condition of the properties surrounding the Manhattan terminal.

It is the aim of the Urban Redevelopment Act to provide for a different type of procedure. It is now within the power of the City Planning Commission to declare that a blighted district exists around the terminal of the Queensborough Bridge. It is then possible for either the Commission itself or for private agencies to work out a plan for the improvement of the whole district. This is the sort of study which calls for coördination between various planning agencies whose interests are involved. For example, the Borough President of Manhattan is responsible for the streets and their maintenance and their improvement. The Park Department, which is a city-wide department, is responsible for any park areas for which it may be possible to provide. There are other city departments responsible for sewers, water supply, and those service lines which are supplied by private corporations such as electricity, gas and telephone. So far as private property is concerned, there are many types of interests to be considered. The great majority of properties are encumbered with mortgages and it is not possible to act without the consent of the mortgagee. There are, however, obvious advantages that may be secured by private properties through a general improvement of the neighborhood. The great increase in desirability of the Rockefeller Center area is evidence of this.

It is possible to plan on a large scale if the plan is made by the group without incurring a large initial capital expense such as was encountered by Mr. Rockefeller in assembling the property for Rockefeller Center. Under the Redevelopment Act the city may coöperate to lessen the expenses in the first years of an improvement through limiting the total assessment for taxation for a period of ten years to the existing amount. A corporation undertaking a group enterprise in which existing owners and mortgagees retain a participating interest is able to proceed without initial capital cost for acquisition by making temporary arrangements to pay, to the participators in the project who suffer from temporary loss of income, an amount to offset such loss during the period of readjustment. As new facilities come into use and the total earnings of the district are increased, each property may receive from the group income a share in proportion to its relative appraised value.

The improvements must be planned in such a way that large losses in current income are not suffered because of wholesale sweeping demolition. By planning in advance there will be stabilization and

even improvement of income before any demolition takes place. For example, supposing the urban redevelopment project under consideration were an adequate terminal, plaza, traffic separation, and the improvement of private property at the Manhattan terminal of the Queensborough Bridge. The plans would be made well in advance. The economic and financial scheme would be studied as carefully as the physical arrangement. Changes would be made gradually, step by step, probably commencing with outlying properties and stabilizing the income of these before proceeding to the center of the project. There would be need for proper timing, especially as between the execution of public improvements and private improvements. Where the lines of streets are to be changed, these lines will not follow arbitrary legal divisions which are set by those properties that can be acquired by the least possible condemnation award. The lines of new streets can be set for the greatest possible ultimate benefit.

The idea will be that properties which are disturbed will be given restitution through equivalent quarters on a new location. For example, let us take a prosperous corner drug store which may be the tenant in the lower floor of a five-story tenement building, this particular building being one of the more prosperous of the group and at the time the project is undertaken, we will say, fully occupied, but, due to the high assessed values and the amount of taxes paid, earning little more than its taxes and carrying charges.

If eminent domain is used, the award in condemnation is based not upon the disturbance to the business or social life of the property but upon the fair value of the physical property acquired as determined by the courts or by a commission. Awards in condemnations may be said to represent capital values of property as reflected in the market for real estate and the appraisals made for tax purposes. Tenants, except insofar as they are protected by the covenants of their lease, have no redress. Although an owner receives the award in condemnation, he cannot withdraw the cash until he has shown that his mortgage is satisfied. There is no redress to a tenant or owner for temporary disturbance due to a public improvement provided access is maintained during the improvement and provided the final improvement doesn't take away any facility formerly enjoyed. Up to the present time our processes of condemnation have seemed to recognize only a taking away or a deprivation of something real and tangible which can be proved to have value, and it has been assumed that the only acceptable "just compensation" required by the constitution was money equivalent, as determined by the courts. There has been little recognition of the functional part played by the persons and corporations in the life of a neighborhood or city.

For example, the corner drug store, to which we have referred, fills a need in its neighborhood, whether it be an old-fashioned, real

drug store or a new-fangled, quick lunch and quick turnover emporium. If the plan for reorganizing and replanning the neighborhood takes this function into consideration and continues to furnish a suitable location and suitable shelter, there is no damage or deprivation. If the plan is so worked out that the original owner and original mortgagee of the building in which the drug store is located are able to continue to furnish this location and shelter, there is no deprivation and no damage to their interests. If through the group plan, former wastes can be eliminated and the service improved, the result may be benefit rather than damages. These are considerations which should be kept in mind in working out a plan of redevelopment.

Part II

When we first started work drafting a law to aid urban redevelopment, it was my naive wish, as a designer, to build up a doctrine of equivalent value and require that each person or corporation affected by the redevelopment should be given equivalent value after the execution of the plan. For example, take our corner drug store in the tenement house. Supposing that the line of the street were to be moved one hundred feet. It would be physically possible, although expensive, to move the whole building and give it a new location just as desirable, or more desirable, for business purposes. As an alternative it would be possible to reconstruct a new building giving equivalent or even improved facilities. If the new building can be financed on a basis which will carry the obligations of the old, then everybody would be better off except during the disturbance during reconstruction. It seemed logical to me that the first task of an urban redevelopment act was to protect existing persons and corporations against the loss suffered during the period of reconstruction, and then to establish a method for determining whether or not the facilities turned back to them were equivalent to the facilities in the enjoyment of which there had been temporary disturbance.

None of this sort of thing can as yet be written into law. Many hours have been spent in discussing this sort of procedure, but the law is written merely stating that after 51 per cent of properties, by area and by assessed value, are set to go ahead, then eminent domain may be utilized to take over the balance. Hence it is up to the Urban Redevelopment Corporation to offer inducements to existing interests in order to induce them to participate. Eminent domain is necessary only as a last resort to compel recalcitrants to yield to the desires of the majority, and to prevent hold-outs to cash in on nuisance value.

Let me emphasize here that what we seek to accomplish is imaginative planning and the practical execution of desirable plans. Condemnation need not be total condemnation. It is possible to acquire easements, air rights and other forms of partial taking without actually acquiring

what is known as fee simple. Supposing we have a block of small houses and that for the first stage of the plan these houses need not be disturbed. Let us say, however, that the rear yards are cluttered with garages and outhouses. Condemnation could be used to take in fee simple a strip of property running through the center of the block. This would create question as to depth of yards in the properties remaining. Under our Multiple Dwellings Law in New York State, the reduction in depth of lots would definitely reduce the bulk of buildings permitted on the property and, hence, possibly detract from value. But supposing that instead of taking the rear yards in fee simple, only the buildings are taken, plus the right to control the buildings erected on this portion of the property. There might still be a monetary damage to be awarded but it would be less than total condemnation. If the shacks in question were in bad condition the awards paid for them might be exceedingly small. Perhaps if new relocated garages were offered the existing owners might be willing to trade these for a restriction upon the whole property in conformity with the plan.

This is one suggestion among many possible alternatives for procedure which cannot be written into law. But the law, by permitting the exercise of the right of eminent domain for planning purposes, makes this type of negotiation possible.

Another example of the difference between writing a law and working out a practical plan is to be found in the paragraphs dealing with capitalization and distribution of earnings. The law definitely prescribes open bookkeeping and definite methods for calculating original development cost. For the initial ten year period, dividends are limited to five percent of this development cost, less disbursements for interest on indebtedness. Our committee has been criticized for not following a simpler formula for limiting dividends to a fixed percentage on the stock, such as is already familiar to the public. Why was this not done? And, if inadvisable, why was the law not made more specific?

The answer is simple. It will be as necessary to apply imagination and ingenuity to the replanning of the capital structure as to the design of the physical buildings. The committee recognized that it was essential to provide for three different kinds of capital and, in addition, to permit such flexibility of terms as was needed to secure workable contracts for the use of each class of capital. First, the committee recognized capital represented by the *existing interests* in real estate equities or mortgages upon this real estate. (Cash required to replace or take over existing interests belongs in this same category.) Next, the committee recognized the need for new revolving or *working cash capital* to the amount of ten or twenty percent of total project cost. Finally, the committee recognized the need for new *investment capital* to be used for the execution of the physical improvements.

In each of these classes of capital the problem of priority of capital

interest, return of principal, and earnings is very different. Furthermore, they will differ very greatly in each project to be financed. Without new working cash, the existing capital investments in depreciated areas have been well nigh powerless to help themselves. The existing interests must be permitted to offer reasonable inducements to attract this badly needed new cash working capital. The committee recognized that this sort of capital involved a speculative risk and therefore the way should be left open to provide for a rapid return of principal so as to reduce risk. Had the committee fixed an arbitrary percentage limit to the return on each class of stock the needed flexibility of terms might have been lost.

An idea of what may be gained by flexibility within the limits of five percent of original development cost may be obtained from the following hypothetical case. Assume a mixed neighborhood of four city blocks where arrears exist in the majority of outstanding obligations. New cash working capital is badly needed. Let us say that a five percent cumulative dividend is promised plus a proviso to retire the stock in ten annual installments. The amortization may be made the preferred obligation and the dividend deferred. Such terms should be attractive to large income investors seeking relief from presently burdensome income taxes. Existing interests may be compensated by offering income debentures or special classes of preferred stock for basic values as established by appraisals and common stock to cover secondary or contingent values. First mortgages with amortization provisos may be offered as security for new investment capital. Flexibility of terms and the possibility of accelerated amortization should lead to financial strength. Manipulation and milking of assets should be effectively prevented by limitation of disbursements for combined interest and dividends to five percent of audited development cost.

This flexibility of financial structure should prove helpful in solving many of the difficult problems of transitional adjustment where property, valued for one purpose and no longer economically usable for that purpose, must seek conversion to a new type of use. Large scale planning, and this means financial as well as physical planning, can help to solve the perplexing problems of readjustment and reconstruction for the blighted central areas of our cities. The Urban Redevelopment Act is legislation which represents a new advance step. It will take time to realize its advantages. It must not be considered a panacea.

Discussion

EDMOND H. HOBEN, Assistant Director, National Association of Housing Officials, Chicago, Ill.

IF THE city is to survive in its mortal combat with the suburb, it is time that it quit convoying its citizens into the enemy's camp by means of improved radial transportation facilities. How the planners can moan

about loss of population from the central areas and parent cities on the one hand, and on the other, either approve or actually propose new ways of encouraging citizens to flee from the city, I cannot understand.

Is it not likely that even a small fraction of the funds spent by a city on radial transportation facilities or land improvements in outlying areas would go a long way toward rehabilitating blighted areas, by public action, private action, or any combination of the two?

The population movements and the changes in neighborhood character are all, in the long run, the result of choices by individual families. Each one weighs the disadvantages of life in a blighted or blighting area against the expenditures of time and money and the inconvenience necessitated by living at the edge or beyond the edge of the city. It seems to me that we are up against two big educational jobs. First, convincing the "purse strings" powers not to spend their money for improvements that are actually killing their own city, and instead to put those funds into urban rehabilitation, and second, when an urban environment for decent family life is created, to bring the opportunities of such an environment to the attention of families who are apt to leave the city or have left the city in a desperate attempt to find a satisfactory place to live.

When I speak of spending public funds for urban rehabilitation, I, of course, include the improvement of those service functions such as smoke control, street and domestic sanitation, traffic control, et cetera.

Now we come to the more specific problem of methods of rehabilitating blighted areas. I dismiss as pure fancy and myth the claim that private enterprise, unassisted by either private or public subsidies, can profitably rebuild any appreciable portion of our blighted areas at a profit under present conditions. The proponents of the 1941 batch of state legislation for urban rehabilitation have, to my knowledge, not submitted a single actual case study showing just what could be done in a typical blighted area—what would be torn down, what would be built, what would be the rentals of any housing provided. The report on a rebuilding proposal in Detroit, included in the proceedings of the ASPO Conference on Planning Problems, held in February in Chicago, is about as illuminating as any analysis so far. Here it is computed that to reconstruct a 78-acre blighted area, with row housing and apartments at $14.50 per room per month, paying three and one-half percent on mortgage money and a six percent dividend on equity money, would require that the land be acquired at ten cents per square foot. It is estimated that the land cannot be obtained for less than 91 cents per square foot. Who is going to pay the initial subsidy necessary to inaugurate such a plan?

I think that we shall first have to make up our mind whether we are willing to give public subsidy to encourage limited or unlimited private profitable undertakings for neighborhood reconstruction. Secondly, if

we are committed to the use of public subsidy to assist private enterprise, what limits shall there be on such subsidy? This will raise a difficult problem of balance—balance between willingness of present owners and other private interests to write down values and/or contribute cash, and the ability and willingness of the local government to subsidize in the general public interest.

Lest I be misunderstood, I want to make it perfectly clear that I am not opposed to neighborhood redevelopment by private enterprise. However, I do object strenuously to the attempt of some groups to sell state legislation and other plans for neighborhood redevelopment by using the same sort of appeal that is used for the advancement of public housing. It is amazing, for instance, to note that the introductory passages of one of the current Illinois neighborhood rehabilitation bills reads almost the same as the introductory material to Illinois' public housing enabling legislation. We find even direct or inferred claim that the new patterns for private neighborhood redevelopment are a new substitute for the entire urban public housing program. Apparently some of the proponents of this action either are wilfully misleading the legislators and the public in general, or they are inexcusably ignorant of the lessons that have been learned about the real cost of clearance and rehousing gained since the inauguration of the limited-dividend housing program in New York in 1926.

Finally, the time has come for some real, honest application and evaluation, through experience, of the neighborhood rehabilitation plans as provided for in recently enacted New York State legislation and similar legislation that may be adopted in other States. I make a plea for three principles, however: First, that we enter upon this work with our eyes open and the willingness to present and publicize both the real cost involved and the reasons for the public participation that may be required in one form or another; second, that specialized urban rehabilitation plans should not be considered a substitute for good municipal housekeeping and for public housing; and third, that we terminate immediately every public policy and public expenditure that is encouraging and facilitating loss of population and other blighting influences.

GEORGE F. EMERY, City Planner, Detroit, Michigan

I AGREE with the statements made by Mr. Bartholomew relative to the importance of the neighborhood in urban reclamation. The replanning of blighted areas, to be effective, must be done on a neighborhood unit basis where acceptable conditions can be created on such a scale as to give reasonable assurance of their continuous success and resistance to depreciating influences. This principle must be used both in the rehabilitation of existing blighted areas which, by their character and condition, can be repaired and modernized, as well as in the case of

areas which are so far depreciated that complete clearance and redevelopment is required.

The neighborhood unit provides a logical and convenient basis for adequate replanning and enables the subdivision of the problem into sizable pieces which are within the possibility of handling. It is impossible to treat the entire blighted area as a whole since the scope and magnitude of the problem so presented is overwhelming, but a breakdown into neighborhoods obviates this difficulty and renders feasible what otherwise would be impossible.

The development of Waverly as a conservation project is of great interest and value and the possibilities for its success are demonstrated. However, this method of treatment is only applicable to areas which are not in a chronic or even advanced stage of blight.

We have made many studies on the rebuilding of blighted areas in Detroit. Certain interests have advocated the redevelopment of blighted areas in order to maintain the value and business of the downtown shopping area through the construction of housing for higher income groups which have left the deteriorated sections. We have found that the site cost for housing developments in blighted areas are apparently too great, no matter to what income groups we are to cater. The assessed valuation of land alone is several times the economic value for this purpose, without considering the value of existing structures of various types.

I do not believe that any plan for rebuilding of cities, particularly for residential purposes, should necessarily be limited to any one income group. Such blighted areas should be cleared and replanned so as to provide the amenities which are essential to proper living conditions; and these amenities are virtually the same for all people, irrespective of their income, race, or color.

Some way must be found to bring the land cost down to a point where economic redevelopment is feasible. This can perhaps be accomplished over a long period of time by permitting the now operating forces of decay and decentralization to take their full toll so that over a period of years these areas will become completely vacant, tax delinquent, and possibly revert into the control of the municipality. This process is likely to be long drawn out and may be interrupted by some premature, sporadic redevelopment of individual units of property which will further impede and delay complete reclamation of large areas.

Other alternatives, such as some form of subsidy or method of depressing present land values, are possible. If our people could afford to pay a sufficient amount for housing, then redevelopment is possible even under existing conditions. That they cannot is due to the fact that such a large proportion have little or no income, and what they have is very uncertain. It appears necessary, therefore, that the incomes of our lowest economic groups be materially raised, or that substantial subsidies on a large scale be provided.

ALLISON WHITE, Community Planner, Tennessee State Planning Commission, Nashville, Tenn.

IN THE discussion sessions at planning conferences I have noticed that usually the discussor takes the opportunity either to present some subject of special interest to him or to take issue with the main speakers. In this case I would rather emphasize some of the speakers' points which affect smaller as well as the larger communities.

Mr. Bartholomew said that the neighbor is the work unit. In the State Planning Commission's coöperative planning program in Tennessee we have found, even in the smallest community, that the neighborhood groups are the best approach to the whole community. Pride of neighborhood is stronger than general civic pride. The neighborhood being determined as the work unit is only the first step, however. The neighborhood's interest must be aroused and sustained. Many nonconforming uses and absentee owners complicate the adoption of planning controls. A solution to this problem lies very probably in the use of of the proposed Neighborhood Development Act, which I am sure is familiar to this group. I am sorry that time has not been available for discussion of this legislation. It appears to have wide application possibilities.

Mr. McNeal's description of the Citizens' Planning Committee in the Waverly Area was especially interesting to me, as we are attempting to establish the larger citizens' committee to supplement the work of the Planning Commission. Most communities, including Philadelphia, apparently think the Planning Commission is sealed in a sphere and never gets its plans down to the level of the majority of the people. This idea has contributed to the failure of many planning commissions. A Citizens' Planning Committee with knowledge of the program of the Official Planning Commission can counteract this obstacle to planning.

The major emphasis of the papers presented has been on cities. In the South our cities are much smaller, but we have the same problems. Many of the small towns have not yet experienced the movement to outlying areas. This movement is coming, however, and arresting it should be one of our major concerns. I believe that the system used in the Waverly Area has application in our cities where incipient blight is occurring.

I have not had an opportunity to study the New York Act presented by Mr. Holden, and as I feel it is designed for the large cities' problems, its application and use in small communities is consequently limited. Mr. Holden stated that they could not write into the act the way to get things done. We hope that the way the act is put to use in New York will serve somewhat as a key to the solution of the redevelopment problem in other cities.

Zoning as a Positive Instrument of Planning

CARL FEISS, Director, Planning and Housing Division, School of Architecture, Columbia University, New York City

MUNICIPALITIES and counties, working first from state enabling acts and then from the authoritative works of Edward Bassett, Robert Whitten, Alfred Bettman and many others, developed local zoning ordinances of tremendous variety and proper local individuality.

Those of you who have had an opportunity of studying the ASPO "Planning Manual for Zoning," prepared by Hugh Pomeroy and Walter Blucher, will recognize immediately how much wider a territory is covered by zoning thinking now than fifteen years ago. In fact, zoning as it originally started out, developed a negative theme. The leitmotif has been a restrictive one: "Within any (blank) district no building or premises shall be erected, used, arranged, or designed in whole or in part for other than one or more of the following uses:" etc. But the new concept of zoning is apparently going to be on the positive side, as closely related to creative planning as possible. To quote Mr. Pomeroy ("Planning Manual for Zoning," preliminary draft, page 11, section IV): "In its immediate application, zoning seeks to protect the character of existing sound neighborhoods, to assist in the rehabilitation of blighted neighborhoods, and to provide a plan of development for future neighborhoods and communities." It is not necessary to agree with Mr. Pomeroy to recognize immediately the expansion of zoning thinking beyond the narrow interpretation of the phrase "health, safety, morals, and general welfare" in the police power. Thank God general welfare is such an all-inclusive term!

Fifteen years is a short time. Maybe the hopes for zoning have been too high. Certainly its effect on the attractiveness and usefulness of our cities, its effect on the stabilization of land values and an increased tax income for most municipalities has been negligible. Apparently the reason for this is not so much an error in the basic concept of zoning as the lack of a supporting cast to implement it. I happen to be one of the school of thought which believes that zoning cannot stand alone, that zoning is part of the planning process, and that since zoning has preceded comprehensive planning in almost every municipality and county throughout the country where ordinances are in effect, its success has been limited. We are compelled to recognize the fact, in this school of thought, that planning itself is also an immature science or art, that it has followed rather than led, and that it has only too often, as has zoning, been a tool of selfish interests and unimaginative leaders. Obviously, two imperfect tools in the hands of the unskilled or unprincipled will not prove of much use in constructive city building. Our duty at the present time is to finish the forging of these tools and to train the worker in their proper use.

Considering these difficulties as a challenge to our inventive genius and imaginative forces, how is zoning to be made a positive instrument of planning? Well, in the first place, it is obvious that in a community where there is no planning, zoning simply provides for the protection of a status quo. But there are few zoning maps drawn which do not implement planning of sorts, whether it be plans for the future sales of property by local realtors, or plans for the unlimited expansion of retail business by the chamber of commerce. This implementation is accomplished more often in the preparation of the zoning map than in the actual language of the ordinance. Our cities are filled with districts which have been of predominant single-family use, which have been zoned for a less restricted use at the demand of property owners or others with the clear intention of providing for a change in use which should prove profitable to all interests involved. This is planning, very definite planning, but is not necessarily for the best interests of the community as a whole. And even when those responsible for this type of planning have the very best interests of the community at heart, without a comprehensive plan for that community's future development zoning becomes spotty, well meaning but ineffective, and its influences for the general welfare are almost indiscernible. So far, the most positively beneficial effects of zoning have been in the protection of the highest cost and most highly restricted residential areas. This has been brought about by the very fact that such areas are at the top of the list and practically all restrictive provisions apply to this use and area type. As one goes down the list of land-use types, restriction after restriction is lifted until at the bottom there is pretty much of a free-for-all. It can be pointed out in many communities in which there is zoning but no planning (as we planners like to conceive of planning), that zoning has had a positive effect on the community's welfare and has succeeded in preserving the values and character of the best residential area. That is certainly all to the good, but it is a very small part of the whole picture.

But how are we to enlarge the scope of the planner's activities? The cry of most planners is that they cannot predict what the future of their community is going to be, and that the zoning and planning job does not include making blueprints for a new society. They say that their job is a strictly technical one, specifically to preserve existing values wherever they exist and to provide for a flexible enough ordinance so that the community may grow in a "normal" fashion.

Flexibility—the fear of the unknown. Apparently when a man does not know what is going to happen he is willing to let anything happen. The idea of directing events, the idea of a man shaping his own destiny and the destiny of his community, is to be avoided. So a zoning map remains "flexible" and our technicians avoid being called dreamers and starry-eyed planners. They manage to save their own

faces for awhile at the sacrifice of the face of the community. And what is this "normal" growth which they are attempting to preserve by lack of planning ahead and by underzoning? I for one do not know what "normal" means. There are those who are optimists enough to believe that if man is given sufficient time, through inherent natural qualities he will properly shape his destiny and create a better environment in which to live and work. I am not only a pessimist but I am also impatient. Of course, there have been great advances made in science and in medicine, but neither our society today nor the cities which house it are much of an improvement over the Periclean of twenty-five hundred years ago.

Look around. Do you really want to preserve the *normal?* Do you want to wait for the slow evolution promised by the optimists? We are theoretically reasoning, rational beings. We should be able to decide what we want, what we should have. There is no limit on our technical ability to properly house our society once we have made those decisions. The flexibility that we want is the flexibility which comes through the freedom to think, to alter our man-made laws when necessary, and the freedom to use our inventive genius and our technical proficiency without limit other than the controls of the general welfare.

We are planning and zoning technicians. We are not anthropologists, sociologists, political philosophers. Ours is a different training, and the ultimate decisions as to the nature of our society perhaps do not properly belong with us. But we are intimately concerned with our own destiny, and we have not only the right to but also the obligation to think about it. Our task is to sharpen the tools for these other technicians to work with and to provide the simplest and best means for the use of lands provided to us by nature and the shelter which man builds for himself.

Physical planning and the zoning which is to implement it are weapons of great power. The planner has an opportunity of creating a whole new invironment with these weapons, and he may also, if he does not watch himself, inadvertently destroy his community. The timid and the weak, fearing this latter possibility, will prefer to maintain the status quo by every possible means, allowing our urban, suburban and rural pathologies to cure themselves by so-called normal processes. True planning, however, is interested in the status quo only as a jumping-off place. The true planner must work with trends. He must find out what has been, what is, and estimate what will be, and at the same time what could be, if his energies were allowed their fullest scope. And as he plans those controls of environment which he believes most useful to society, he looks for the legal means by which to anchor his plans. This is where our new positive concept of zoning comes in.

Consider the physical planning function in its most universally accepted role. It includes, through an analysis of population, of economics, and of land, the decision as to where people should live and work, how they are to intercommunicate, and how they may be best served by the community with the minimum of friction. It is recognized that the physical planner is to prepare the layout of highways, to provide for adequate recreation space, to preserve natural resources from destruction, and to establish the general uses of land within the area of his jurisdiction. No one argues that these are incorrect functions. His powers, however, vary from one place to another. In certain countries in Europe he has direct control of the decisions affecting land use. In this country, however, for the most part the physical planner works merely as an advisor to those administrative agencies which have the full power of control. His only effective and positive power potential lies in the zoning ordinance. Now when a planning agency exists in a community it is generally recognized that the preparation and the administration of the zoning ordinance is properly a function of that agency. There are many examples, of course, of a separation between the zoning and planning agencies, but this is usually a hangover from the early period in American planning history when the private city planning practitioner for a fee went into a local community, drew up a street plan, prepared a zoning ordinance, and then moved on to fatter hunting grounds. He left the community satisfied that it had been planned, and it remained prefectly willing to administer the zoning ordinance as prepared, forevermore.

The old-fashioned type of planning is happily dying out and gradually communities are setting up permanent planning staffs which prepare master plans and attempt to administer them through proper zoning. At least, this is what we like to think is happening, although information to that effect is meager. There is some confusion as to how zoning can effectively implement some of the broader concepts of planning which have been discussed above. This confusion lies perhaps in the fact that the planner has not used his zoning powers to their fullest extent. Recognizing, as we have, the function of the physical planner to establish general land uses, and recognizing that in so doing he automatically directs the future development of his community, it is a natural corollary that attendant zoning provisions also increase in their usefulness to him.

Zoning can be a positive instrument in planning only when its regulations are applied to the zoning map in carrying out the provisions of the master plan. All right, you say, zoning has always been applied to a map. This is perfectly true, and the zoning map has been as legal as the official map. But the zoning map remains a limited official document, limited by the fact that it includes only those mapped controls which are immediately acceptable to the community on the

basis of amenability, expediency and immediacy. On this basis it directs the growth of the community over a very short period of years. It is up to the planner to direct the changes made in the zoning map in order that these changes may implement the master plan which he is constantly developing. It is too much to expect of a zoning map, and here I disagree with Mr. Pomeroy's statement quoted earlier, which was that it should "provide a plan of development for future neighborhoods and communities." Zoning can only *implement* the plan of development for future neighborhoods and communities as conceived by the planner.

Through zoning, the planner can not only protect areas which should be protected because of their already inherent good qualities, but he can also plan with it for the protection of areas which in his estimation in the future may require protection. It provides him with a security, a fore-knowledge that within his grasp lie powers which may make it possible for him or his successors to bring broad plans to fruition step by step, as the needs of the community change and as his knowledge is improved of how people should live and how they can live.

The Land-Use and Population-Density Plan as a Basis for Zoning

JOHN T. HOWARD, City Planner, Regional Association of Cleveland

THE fundamental structure of a city is its pattern of private land use—not alone the kind, but the intensity of use as well; and its major functions are expressed in terms of the familiar land-use and population-density classes. All the other physical facilities of an urban community—the minor functions, you might say—exist only to serve these land uses. Streets and other parts of the transportation system; water and sewer lines, the utility system; libraries and schools; parks and playgrounds; police and fire stations, and other public buildings; these are all simply services, which the community has provided for itself. Their usefulness and economy depend on the way they fit the present and future land use and population pattern.

These public service parts of the city obviously are the ones most properly subject to public planning. Given a reasonable political structure, with political boundaries co-terminous with the community and a government with concentrated legislative and administrative responsibility, and given an administration of intelligence and integrity, the coördinated control of these services is also obviously simple—and well within the historical sphere of governmental action.

As long as urban growth was rapid and followed fairly regular rules—such as those the Chicago sociologists laid out—city planning

could hope to be effective and useful by exercising control in this field, without doing much more about private land use and population distribution than to understand and predict the changes.

But now and for some years, we all have realized that blight and decentralization, oversubdivision and other factors have demonstrated that these public services cannot be planned for efficiently and economically—they cannot fulfill their function of service—without public control of the other half of the picture. This failure is less serious than the concomitant failure of the land-use pattern itself to fulfill its function, of providing physical facilities where people can live a life that is tolerable—and of providing stability of investment and a locale where business and industry can operate efficiently.

This failure of the underlying structure of our cities has created a new emphasis for city planning, and an imperative on the part of the communities themselves to use their governmental institutions to remedy the situation—to extend public control from the services to the private land uses. Though this imperative is not yet crystallized as such, it is already expressed in the public housing movement, in more money and more attention for city planning commissions, and in demands for stricter zoning. And it is being voiced not alone by those who consider themselves socially conscious, but also by those whose interest is mainly in dollars and cents.

This extension of public control in the field of physical development is a part of the broad movement, going on all over the world, and going back for a century, to make government responsible for more and more of what the community decides are necessities to its existence, whenever and wherever the normal business activities of private citizens fail to fulfill these necessities. This process has gone on by violence and dictatorship in Russia, Italy and Germany. It has gone on by peace and democracy in England, the Scandinavian countries and the United States. It is not new. In this country, successively postal service has been taken over as a public function, and highways, education, recreation, health service, unemployment relief, and low-rent housing.

The need for city-dwellers is to reorganize—or organize—their physical environment, to improve their chance for safety, convenience, economy and pleasant living. The need is not only a social one, nor is its fulfillment at odds with our economic structure. This organization is necessary to the security of investment, in land, buildings and business; to efficiency and economy in the operation of business and industry, and the reduction of their tax burden—the "costs of living" of individual private enterprise as well as of individual citizens.

Clearly, the control of private land use and population densities is essential to bring order out of the chaos of our cities. But, it may be asked, have we not been using zoning to control land use and population density for twenty-five years? Obviously, no—or our cities would not

be in the state they are in. We have used zoning negatively, to regulate; but rarely positively, to direct. In very few instances has zoning been effective in decreasing population density, or in revising a land-use pattern that needed revision. It has kept good areas from going bad, and prevented bad ones from getting worse. But it has frozen existing conditions—be they orderly or disorderly, logical or illogical. And what our cities need is not a negative protection, but a positive improvement—and a strong instrument to effect that improvement.

It is clear that zoning cannot be used as such a strong instrument, unless it is much more carefully worked out than it has been in the past—unless it is based on plans more comprehensive, in every sense. We cannot tell a man that he cannot build a small factory in an area where there are already scattered small factories, where they have been allowed under earlier zoning, unless we can completely prove that the area ought to be and can be used more profitably to the community and the majority of its individuals for the higher use we designate. We cannot hold a new apartment building to twenty-five percent coverage and only eight families, where adjoining apartments have seventy-five percent coverage and thirty families, unless we can prove similar long-term, wide-spread benefits. This is so with compulsory termination of nonconforming uses, and the withholding from development of fringe acreage that its owners have always considered potential suburban subdivisions. We must do these things, if we are really to direct and improve the use-of-land and the density-of-population pattern; and we can justify them, to the public and the courts, only if the zoning rests on the base of a clear and logical comprehensive plan.

If our zoning is to exercise so much greater power over individual property rights, both the zoning and the planning must be increasingly democratic. The goal is not regimentation, but self-control—self-discipline. If only to get the ordinance passed, the plans behind it must be thoroughly understood, approved and even formulated by the electorate.

Aside from this requirement of public sharing in the drafting of the controls which it is going to impose upon itself, the technical method of preparing land-use and population-density plans as a basis for zoning is, on the surface, simple and obvious. This is a good thing, for a complicated technique might obscure the necessity of independent judgment for every community. This is a point strongly emphasized in Hugh Pomeroy's *Manual on Zoning*. And since that book sets forth the method in great detail, I shall outline it very briefly.

As the drafting of a plan naturally follows the data-collecting, we can assume the various studies and surveys to be complete. From the land-use and population-density surveys, the present pattern has been determined, and the present standards of use have been calculated—the number of acres now in each use class per thousand people or

families, and the range of intensity of use within each class. The first exercise of judgment comes in evaluating the adequacy of these standards, and setting up desirable standards as a goal for planning to achieve.

This is where the negative approach gives way to the positive. The new standards—call them "norms," a convenient term using the distinction between "normal" and "average"—must be positive, based primarily on the biological necessities of the human animal, and secondarily on the economic necessities of a system of land values that cannot be upset overnight. They will differ from city to city. In New York, 120 families per acre has apparently been adopted as a density maximum that can be worked toward in apartment areas; in Cleveland, we have arrived at the figure of 34. There must be a balance, between the ideal and the possible; but also the density "norm" must in almost every city be a higher standard, for almost every type of land use, than the present "average".

Perhaps this is the time to bring in defense. Certainly in some of our cities, considerations of air raid precautions will influence standards for density as well as distribution of land uses. It is a happy fact that defense considerations point in the same direction as many other biological and economic factors.

For peace as well as for war, the use norms as well as the density norms may also require revision. Too great or too small a proportion of the city may now be in one type of use or another. Obviously, in arriving at new standards, the trends of various factors must be considered: *e.g.*, is industry becoming more important, or less? are factories requiring more lot area per worker or less? are families getting smaller? These norms ought to be understood and accepted by the public at large, and by various special groups in particular, before the next step is taken in the planning process. Given our norms for land use—so many acres per thousand people, of each type and density—and given the number of thousands to be planned for, the land area needed for each class of use can be calculated by arithmetic: "a" times "b" equals "x." These totals constitute the statistical land-use and population-density plan. The graphic plan is a matter of playing picture-puzzle on the map of present land uses, evolving a pattern which fits: first, the topography and natural conditions; second, those parts of the present pattern which are clearly unchangeable—such as, in Cleveland, the steel-mill district in the river valley; and third, the goal of orderly and economical relationship between different parts of the city. This is a thoroughly familiar planning technique.

And this is the step in which it is most essential to have community participation, for this plan should *be* the zoning ordinance, ideally. Its provisions as to density and use distribution should be reproduced, with as little alteration as possible, in the zoning text and map. Obviously the ordinance will not pass unless the people affected by it are

sold on it first—which means building up "pro" sentiment as well as converting the "antis."

Obviously unavoidable compromises with existing conditions will so stretch the final zones for each use—especially intensive uses—beyond the exact calculated need, that it is hardly necessary to set up a theoretical cushion or leeway. The exigencies of the present pattern will take care of the cushion; the fight will be to make it small enough.

Starting with a truly comprehensive plan, given legal sanction through zoning, we can safely proceed with public works programs and other aspects of the public service phase of urban development. But where does the planning principle of flexibility come in? Suppose the growth estimated for twenty years occurs in ten? Suppose some technological change upsets major calculations? Planners have always opposed frequent zoning changes, and asserted that confidence in zoning permanence was essential. But isn't that because the changes we have fought have almost always been revisions downward, when the standards of zoning were already so far down that to relax them further meant practically to cancel them?

It seems to me that with the strongly controlling and directing kind of zoning ordinance that I have described, with so little leeway between potential limits of development and the legally allowed limits, we shall have to develop zoning which is more flexible in the time-dimension at the same time that it is less flexible in space.

After all, our present ordinances are no more permanent than the wisdom and integrity of a city council. If there are to be changes, why not plan for the changes, by some such system, for instance, as requiring regular five-year revision of all or parts of the zoning?

The English are further along in this sort of thing than we are, and in dealing with precisely the problem that will vex us most: vacant acreage on the fringe of cities. Their practice is to declare certain areas as unripe for development, barring completely any change in its present rural state. Every three years, the owner is assured of a chance to have this status reviewed. If at that time an area is judged ripe, if there is a community need for more building land, the restriction is removed and previously prepared zoning regulations are slapped on, to control the new development.

Some machinery of this sort will have to be developed, so that zoning can become a proper instrument for flexible as well as comprehensive planning. Before the last decade the time was not ripe, perhaps, for this vigorous interposition into the workings of our cities. But now the time is ripe. The physical need for such planning certainly exists. The spirit and temper that can carry it through, among citizens and legislators, is appearing. The real work must be done by the people of the communities themselves. But to the planner falls the nice little job of persuading the people that they thought it all up by themselves.

The Planning Approach to Categories of Land Use

EDWARD B. WILKENS, Supervisor, Local Planning, Survey Projects, Virginia State Planning Board, Richmond Va.

THE Virginia State Planning Board is pursuing a series of local planning studies in some eight towns and counties in the State. These are for the most part small communities ranging from 2,000 to 8,000 in population. In preparing the land-use maps it became necessary to set up categories of land use which would define the various areas of the community in terms of their existing functions as parts of the community organism as a whole. We turned to the standard land-use lists for aid.

At first they seemed entirely satisfactory. It soon appeared, however, that while the residential categories seemed to work quite well, the business and commercial categories were somewhat less satisfactory; baseball parks, battery repair shops, beauty parlors and beer gardens were all grouped under one heading—that of business or commercial use; and, while their proprietors would define the purpose of these establishments to be to serve the public and to make a profitable return to the owner, the effects of these services upon the public and upon the other business uses surrounding them vary characteristically with each service rendered. Perhaps some of these divergent effects may be more clearly defined by further subdividing the business land-use categories themselves; but such subdivision will not solve the problem of wide divergencies in the same basic use of land. The effects on its neighbors of the local grocery or delicatessen which serves the needs of a small area and the effects of a drive-in super-market are very different indeed, although they both answer the same need for the provision of foodstuffs to the public.

When this point was reached it became evident that if a really worthwhile solution was to be found it should be based on an analysis of the fundamental factors which determine our land-use categories. In other words, "Do there exist some guiding principles or what might even be termed 'natural laws,' the recognition and understanding of which will enable us to establish adequate categories of land use?" In embarking upon such a philosophical approach it is obvious that this consideration of the use of land must be made in terms of its usefulness to man.

If we examine any list of land-use categories we will find that it has been determined upon consideration from one or many of the viewpoints indicated in the outline which follows. The outline is, of course, capable of expansion but it represents, I believe, most of the basic approaches to land-use categories; such basic approaches as those of the engineer, the sociologist, the lawyer and the many other

professional and philosophical attitudes which are contributing to our broadening concepts of planning.

An Examination of Land-Use Categories

In various combinations and with varying degrees of importance land-use categories may be established upon the basis of:

1. The actual or physical inherent characteristics of the land itself
 a. Use of land as a site
 b. Use of land for natural production as the source of raw materials, animal or vegetable products useful to man
 c. Use of land because of its proximity to a "stream" or "pool" of human beings
 d. Use of land for movement (communication, transportation, transmission)
 e. Use of land because of access provided to natural means of transportation (water, air)
 f. Use for insulation
 g. Use for recreation
 h. Use for purposes of nature and as a storehouse for natural energy (drainage, water supply)
2. The detriment caused to adjacent land use (basis of early zoning control)
 a. Noise
 b. Odor
 c. Radio interference
 d. Danger (incendiary, explosive, respiratory, moral)
 e. Detrimental access, congested or incongruous pedestrian or vehicular traffic, parking, service utilities
 f. Auxiliary or accompanying uses (restaurants, railroad sidings, cheap amusements)
 g. Visual, or psychological annoyances (flashing electric signs, ugly advertising, inharmonious blank wall areas, depressing symbols of human ills—hospitals, funeral homes, cemeteries, insane asylums, jails)
 h. Disposal of wastes (by air, land or water)
 i. Impairment of arrangement, light and air orientation
3. The type of structure erected. (Basis of second step in history of zoning control)
 a. Permanence, resistance to fire
 b. Height, bulk, coverage, need for outside light and air
 c. Appearance
4. The capacity of the use to crowd the land. (Basis of third step in zoning control)
 a. Industrial (fixed structural forms, cost of lifting bulky goods, cheap land required)
 b. Commercial (flexible office space, tall buildings, high land values)
 c. Residential (as a "profitable" investment)
5. Movement patterns of individuals or groups
 a. Sale of goods to be carried away
 b. Sale of goods or services enjoyed on premises
 c. Opportunities to work
 1. Many people, small space
 2. Few people, much space, equipment
 d. Storage of goods (and people) little movement in or out
 e. Centralized services visited occasionally by all
 1. Public
 2. Private
6. The services required or fostered by the activity pursued
 a. Public (roads, police and fire protection, education and training)
 b. Utility (water, sewerage, power, railroads)
 c. Private (restaurants, shops, accessory services, cleaning services, use of waste products)
 d. Supply of population (housing)
 1. Labor
 2. Consumers

7. The service rendered to the community
 a. General (sources of employment, coöperative and group savings in duplication, specialty services—luxury services)
 b. Neighborhood (convenience)
 c. Charitable, social, esthetic
 1. Public—permitting general admission (parks, schools)
 2. Semi-public—(cemeteries, some institutions)
 d. Economic (taxes, buying power, meeting of community needs)
 e. By public utilities (public, municipal)
8. The taxable values produced (or destroyed)
 a. Real (direct, hidden)
 b. Fictitious (subsidy, delinquency)
9. The public or private ownership of or access to the land
 a. Public—(direct service to "consumer"—parks, schools, beaches, zoos, "neighborhood service" type of museums)
 b. Semi-public—(public service a by-product as—cemeteries, or public service with admission fee—sanatoriums)
 c. Public service—(no general admission—incinerators, morgue)
 d. Community public—(Municipal building, courthouse—centralized service)
10. The non-flexible nature of public utilities and land-ownership patterns (Streets, bridges, transportation lines, water mains, etc.)
11. The effects of pressure groups.

Let us examine the criteria derived from the actual physical characteristics of the land, and those based on the service rendered to and required of the community by the many activities that man pursues in his communities.

The first primary characteristic of land is that it provides a site, a place on which to put things. Another equally obvious elemental characteristic of land is that it may be used for natural production and as a source of raw materials. In this respect I think we must broaden the term "land" to include all the physical features of the earth, and thus recognize the productive capacities of air and ocean in their ability to be useful to the human race.

Land also becomes useful because of its proximity to a pool or stream of human beings. This at first may hardly seem to be a basic feature of land itself, but the large masses of human beings which form our cities and towns are almost as slow to move as the physical features themselves and in many respects bear the same relationship to a locality as the trees that grow upon it.

Land is also useful for movement, recreation, and, as we are using it in our greenbelt towns, for insulation. It is useful because of its proximity to natural means of transportation and, finally, in a paradoxical and contradictory way, land is useful in being useless: it may be useless for the purpose of man in what he may consider profitable utility, but it may be needed for the purposes of nature. We need land as a reservoir for flood waters, mountains to look at, acres of prairie grasses to serve as the lids on our dust bowls, and deserts to restore our sense of proportion. These are the raw materials from which land-use categories are formed. In the light of growing planning concepts, powers and techniques, other considerations besides those based on

the physical features of the land must be considered, and categories based solely on the elementary characteristics of land will not be adequate.

The phrase "detrimental use" is familiar to all of us and may be mentioned now in passing in order to point out that, with our increasing mechanical perfection, we have also increased our powers to annoy each other. The detrimental effects of noise, odor, and physical danger have been long recognized and the right to control them long formed the backbone of zoning ordinances. We are beginning to recognize the detrimental effects of uncontrolled access or incongruous pedestrian and vehicular traffic, and are even giving consideration to the visual and psychological annoyances, the electric sign, ugly advertising and, within limits, inharmonious or ostentatious architecture.

Our next problem is to evaluate specific land uses in terms of the service they render the community. We are all familiar with the city or town which welcomes to its bosom an industry or commercial venture which requires more of the community in service to it than it can repay in services rendered. The same incongruity can exist in the smallest community or neighborhood which permits the entrance of business uses which will demand too much of its capacities. We must analyze each individual activity as a problem demanding the evaluation of the service it requires of a community or neighborhood in terms of the size and needs of the community. We should consider what the cost to the community will be in public services. What will be its demands on the roads, police and fire protection, education and training facilities and on the utility—water, sewage, power and railroad services within the sphere of influence of this particular use of the land?

What are its private demands? What restaurants, shops, service trades, cleaning services and by-product activities will be required or fostered by it? What will be its demands upon the supply of population? Where will it find its workers and its consumers?

What real service will this activity render to the community? How many people will it employ in exchange for the above services, and what levels of living will result from the amounts these people are paid for their work? Will this use of land supply basic needs, special services for certain specific groups of consumers or luxury services for a few? Will it serve a neighborhood, the city, or the transient visitor? How will it increase the total real wealth of the community? Each activity can do its best work only when properly located and there is a place in the national region for all.

The question I should like to leave with you is this: Can we refine our methods of classifying land use to include these factors and define these functions? Can we improve our planning analyses and make our zoning laws more effective by redefining our land-use categories so that they will more clearly describe the function of each activity as part of the community organism?

Discussion

MELVILLE BRANCH, Jr., National Resources Planning Board, Washington, D. C.

Urban Zoning has not been a truly positive instrument of planning. Surely, no one can look at the chaotic conditions of cities today and fail to acknowledge that urban planning and its "positive instrument" need revitalizing in the one case and overhauling in the other.

Although it is true, as Mr. Feiss has pointed out, that it is slowly becoming possible for zoning to serve as a means of achievement rather than a purely negative restriction, it is also true that this change is taking place too slowly to keep pace with the critical problems which demand attention. Private privilege can be reconciled with public interest, but not through existing zoning ordinances. Not only have these ordinances often been founded on guesswork, but rarely do they reflect an acknowledgment of the social and physical needs of today, much less an enlightened plan of action for tomorrow. Minority pressures have continuously prevented even a rational modernization. Preservation of the status quo remains the power behind the somewhat tarnished throne of zoning.

The scope of zoning is completely out of tune with the problems which it seeks to cure, and the constructive development which it must strive to achieve. It is incapable, in its present form and as now administered, of securing the social objectives that are essential in the modern economy, for it does not even adequately regulate so fundamental a factor as density.

Planning is responsible for zoning failure or success. If zoning has been weak and inefficacious medicine for urban ills, the fault lies with the learned doctor who wrote the prescription. City planning has neither conceived nor underwritten enlightened zoning, nor of itself been a strong enough force in the community to provide for the constructive use of what could be a powerful means toward community betterment. In many localities, these necessarily interdependent functions have become not only estranged, but even divorced and widowed. The existence of zoning without intelligent planning and of planning without adequate zoning is a pathetic and ridiculous situation. Roughly speaking, there are only one-tenth as many "comprehensive plans" in the United States as there are zoning ordinances. Obviously, zoning can be only as constructive as the planning which it serves to translate into reality. It has neither meaning nor validity without its "better-half."

If there is to be better urban zoning, with sufficient provisions for forward progress, or even mere re-zoning to bring matters up-to-date, we must first have better planning. The slow liberalization of zoning authority has resulted from planning justifications in terms of "general welfare." If it could not have been shown that this "general welfare"

was better served by the more obvious restrictions, then zoning would have died an early death. If it is to be resurrected to the point of contributing to the improvement of cities, planning will have to develop the justifications and establish the patterns.

As Dr. Walker has pointed out in his recent book, the courts in a number of cases have expanded the planning justifications presented before them. There is reason to believe that more extensive and effective zoning will be upheld, once it is proven socially desirable. If the need for planning is demonstrated clearly enough, if the goal is adequately defined, then some means will be developed.

Better city planning, in turn, will depend on greater urban knowledge. The truth of the matter is that we do not know enough about our cities to chart their re-planning or justify necessary controls.

In rural areas, zoning has met with greater success because the extensive and thorough research of the Department of Agriculture has presaged the zoning which it has inspired. As a result, it rests on the more solid foundation of a planning desirability which can be demonstrated in terms of reduced governmental costs, savings to the taxpayer by the elimination of superfluous roads or schools, more efficient land use, or the preservation of resources. The different type of zoning utilized in soil conservation and grazing districts comes after a workable plan has been evolved. As the tool of a definite and acceptable group idea for betterment, these forms have a significance and a reality lacking in the zoning ordinances of our cities, based as they are on inadequate knowledge and related to no clearly-defined goal. Admittedly the city is far more complex than the simpler rurality; but that is our challenge, not our excuse. County zoning and these other forms of rural zoning are carts which are doing a better job because they have been hitched to live horses.

Until there is adequate knowledge to chart a practical way towards more efficient cities, urban zoning will continue as a largely negative force, or even as a "positive" force in a negative direction. In the meanwhile, zoning as a control of urban land use can be made more effective by the application of the five suggestions presented by Mr. Buttenheim and Mr. Helburn in the report of the National Resources Planning Board entitled *Public Land Acquisition—Urban Lands:*

(1) reduction of the blighting densities and overcrowding now generally permitted;
(2) a drastic reduction in the size of districts zoned for industrial and business uses, with care, however, not to go to the other extreme of creating an approach to monopoly for owners of land zoned for such uses;
(3) a realization on the part of smaller communities that they can overzone for residence as easily as for business, and that adequate control may call for some zones of lower density than is commonly required in single family districts;
(4) less "spot zoning" and more positive steps towards gradual elimination of nonconforming uses, and
(5) a higher grade of local administration of zoning ordinances, under which variances and exceptions will be granted with more regard to the general good of the community.

We must also follow their advice and supplement zoning with programs of public land acquisition and tax policies designed to implement planning. Too long has zoning constituted one of a limited number of effective tools in the "positive instrument" kit of planning.

The planning profession has not fulfilled its responsibility in connection with zoning. There must be general acknowledgment that zoning is a form of social control, and that the extent to which it can become a truly positive instrument of planning depends on whether we are willing to be controlled for the "general welfare" of the majority. The profession must recognize that planning and zoning improvement necessitates a reconciliation of private privilege and public interest, of minority interests and majority needs. True public service today demands the leadership of knowledge and of creative thinking. But we cannot wait for the millenium of complete understanding. Forward progress is initiated and guided by those who offer a creative contribution, based on knowledge and a desire to serve their fellow men—and the courage of their convictions. Only in these terms can the planner develop greater knowledge, introduce more enlightened planning, and bring about effective zoning.

BRYANT HALL, Research Engineer, Los Angeles County Regional Planning Commission, Los Angeles, Calif.

TRYING to arrive at the proper amounts of land to be placed in various zones by quantitative measurements based on the commonly used classifications of most zoning ordinances is a futile effort to "lift by the bootstraps." We shall arrive eventually at classifications based on genuine space requirements, appearance, traffic generation, quantums of odor and decibels of noise. In that day the issuance of a use permit will be based, perhaps, not so much upon *what* the applicant plans to do, as upon *how* he plans to do it.

But it is doubtful if we have reached that stage yet; and meanwhile surveys of land use must continue to be made, using classifications based on measurable things. Here we must be above all logical, and avoid attempting to apply too many tests at once. If a survey is to be made of land use, it should study what land is used for, leaving for other surveys the criteria of ownership, condition of repair, rentals and other social and economic data.

The Regional Planning Commission of Los Angeles County has found very useful a decimal classification of land uses, based, not upon the customs of zoning, but upon an objective approach to the problem. We have found that all land uses fall into one of eight major categories, and that these can be subdivided quite satisfactorily into lesser groups. The major categories are: (1) Open Uses (Channels, Mountains, Reserves, Natural Monuments); (2) Agriculture; (3) Residence; (4) Com-

merce (includes wholesale); (5) Industry; (6) Utility (includes streets, etc.); (7) Institutions; (8) Recreation.

Our experience with this in making a regional study of land use in the Los Angeles Metropolitan Area (which covered about 1,200 square miles, with a population of over 2,600,000 persons) has brought into evidence a few points that may be of interest.

First, uses not related to urban population growth must be segregated from those which are so related. Example: the area of a fortified government reserve.

Second, the catch-all phrase "public and semi-public" needs clarification, or abandonment, preferably the latter, since such uses are either institutional, recreational, or for utilities, and require separate analysis. Examples: churches, school playgrounds, cemeteries.

Single uses, occupying an exceptionally large area, or uses which are otherwise irregular in character, must always be noted and either deducted or otherwise allowed for in analysis. Examples: a college campus, a regional airport, an oil field.

Distinction should be made between factors that can be controlled through planning, and those that are independent of it. Habits of land use are subject to very slow change, and must be taken into account.

PAUL OPPERMANN, Special Assistant to the Director, Land Planning Division, Federal Housing Administration, Chicago, Illinois

WITH Mr. Howard's philosophy of city planning I am in wholehearted agreement. The community is an organism and as such its growth and development, being a unitary process, requires over-all treatment—in brief, comprehensive planning.

In the implementation of the planning process, so complicated has the organism of the modern city become, the role of the public authority has greatly widened. Among much evidence of the fact are the regulations governing private land utilization and the stricter technique now employed in many cities in the planning of the street, school, park, utility and other systems representing services, provision of which is the municipality's responsibility.

That zoning is a planning tool which can be and must be used more scientifically and at the same time more positively to direct and guide the physical community toward an appropriate and well-functioning land-use pattern, will surely find a high degree of acceptance at this late date and in this audience.

Although our enabling statutes in almost all States provide authority to regulate density, the power has been utilized to a relatively limited extent. Densities as low as several acres to a single family have been provided in a few ordinances; regulations, however, which have not been put to the test of legality. The presumption in these extreme

cases may be that the community, having the right to determine what its character shall be and having in addition perhaps been wise enough to base its zoning plan upon the comprehensive plan for future development, expects the courts to see, if there is a challange, that the community as a whole requires such regulations to assist in shaping and guiding it toward desired ends.

There are numerous examples of suburban metropolitan communities whose density patterns, achieved with the assistance of zoning, represent high standards in terms of the low maximum number of families specified per acre. Chicago and Cleveland are cases in point.

Persuading, no matter how eloquently, will not, in my opinion, be sufficiently powerful. We will require more practical and more effective measures to secure the community's adherence to our comprehensive plan for the uses of public and private lands. Perhaps nothing less than a system of rewards and penalties, equitably dispensed and courageously administered, probably coupled with the taxing power, will in the long run gradually form the physical structure of the community with popular support, instead of forming the lines as at present, against entrenched opposition, at glacial speed. This means of course not only good planning laid down well in advance of the changes proposed but educational methods far more elaborate, expensive, and expert in graphic quality—in presentation—than we have had in the past. The exhibits at recent conferences, the Institute's film *The City*, various housing "shorts," FHA Land Planning Division bulletins and illustrated talks, the World's Fair model cities, are precursors of a visual education program which should be built upon, but greatly amplify what we have achieved up to the present. The words of the planner, however many, however well-selected and colorful, must be complemented with films, photos, maps, scale-models, charts, and graphs. Economic data and time schedules should be prepared and integrated with the various types of visual-aids-to-planning-understanding. These, added to the apparatus of speeches, bulletins, and reports will aid the public in penetrating the veil, then to confront at long last the neither so sacred nor so esoteric mysteries of planning.

To deal with the problems of cities in a technical world where problems resemble each other and the technique for dealing with them is interchangeable from city to city or from country to country, a broad panel of talents and skills is required; and where necessary this panel should be made available and should reach down even to the city of no population or industrial pretensions. That is a problem of administrative rather than technical invention. But the planning of the city, of the organic cell in the larger organism of the national or international community, can effectively begin on the local plane. That is where the greatest need, and the greatest opportunity to plan, are at present.

Recapitulating, I should like to stress my strong agreement with Mr.

Howard: (1) The urban unit requires the over-all view and the over-all technique of the planner. (2) Zoning as a major tool for effectuating the numerous divisions of the master plan should itself become more exact and a more positive directive measure, building upon the land-use and population-density plan to create a use and density pattern intelligently and boldly constructive as well as restrictive even though it be expressed in the glamourless terms of a small number of families per acre. (3) In supporting Mr. Howard's plea for a wider popular base for our planning I should like to urge that more time and money than heretofore be ear-marked for visual aids and graphic materials in the effort to induce the public and public officials to understand and persuade them to support planning; especially the more fundamental and vigorously directive planning now coming of age in these States. And finally I should like to urge that the urban planners, with respect both to democratic process and to planning technique, appropriate a leaf or two from the book of the county land-use planning committees now operating in 1,600 counties of 40 States.

Philadelphia's Planning Problems

HUGH R. POMEROY, Director Virginia State Planning Board, Richmond

PHILADELPHIA, in common with the other communities of the regional area of which it is a part, is confronted with the problem of the development of effective inter-community administrative machinery to deal with defense activities. The defense job of a community is threefold: (1) To facilitate in every way possible the national defense effort. (2) To adjust the results of the impact of defense activities on normal local governmental and community operations. (3) To prepare for post-war adjustment.

The three activities are interrelated, and they are unaware of the existence of political boundaries. A state line may run down a river, but guarding one end of a bridge would not do much good. The larger community is crossed by township and municipal and county lines, but bombs from airplanes would not know or care where these boundaries are. And the Delaware may be a psychological barrier as deep as Gehenna or as high as Everest, but it cannot stop the movement of workers or the economic force of great industrial developments, and the New York Shipbuilding Company yards and the RCA works are as much a part of the problem of this side of the river as are Cramps, Baldwins, Brewster or Fleetwood.

Fooling around with local defense councils, community by community, is cutting out paper dolls in the face of grave peril. In Virginia, following in a long tradition of representative government, we have worked out what I think is a satisfactory defense organization. We believe:

1. That the State should establish the general pattern of organization and operation for defense councils within the State.

2. That the responsibility for operation in the field of local governmental and community action should be delegated to the affected localities.

3. That if a local defense council is required for only one community—municipality or county—that fact is evidence of ineffective administrative organization of that community.

4. That defense problems are regional within the State and in some situations regional over state lines, and that local defense councils should be regional in their coverage.

In Philadelphia there are two million people at the nucleus of the regional area. The other million and a half are located in some 350 local governmental jurisdictions. I submit that the regional defense problem is a challenge which calls for leadership in the development of a regional administrative attack that shall be as far above local jealousies as is our national defense effort itself.

Let us examine a few items on each side of the balance sheet of planning problems which lie within the city itself.

In 1924 on my first planning tour around the United States from my home in California, I stood on top of the Philadelphia City Hall and saw where the Parkway was being extended from old Logan Square down to Market and Broad Streets. Many times since I have driven over the completed parkway. On that trip in 1924, I thrilled to the beauty and the utility of Fairmount Park. I was enthralled with the dogwood, the first I had ever seen, in the Wissahickon Valley. I went back and told in glowing terms about Roosevelt Boulevard, 200 feet wide for miles; a farsighted enterprise, even though it is now somewhat outmoded in design and impaired in functioning. The beauty of the fountains and the light of culture and knowledge shed by the museums and schools of Philadelphia, add glory to this great old American city.

These things are on the credit side—and it was by these things largely that we used to judge cities—the magnificent, the spectacular, the costly. Then we began to realize that cities should be convenient, especially as we have increasingly shod ourselves with motorized wheels. Well, anyone who has tried to drive out Broad Street when he wanted to get out of town, as I did—once—or who has come in from Wilmington and Chester, can supply the words to the music better than I can—anyone who has tried to get around, or out, expeditiously by other than one way—the Parkway—knows that the traffic circulatory system of Philadelphia is not convenient.

That is on the debit side—and that sounds like money—but that is just the beginning.

We have come to realize that, after all, we build cities to live in

as well as to work in and move around in, and that probably the real measure of a city's greatness is the adequacy of its facilities for living—its houses and its neighborhoods—not the quality of its best houses—those that are pictured in the Chamber of Commerce booklet—but the quality of all its houses and neighborhoods. (You know, as between picturing the best houses and the worst slums, the latter would give a more honest picture of a city—because more people live in the worst slums by far than do in the best houses.)

I do not need to talk about slums to a Philadelphia audience. After all the years of Bernard Newman's work, and the work of those who labored with him or in the same cause, and those who are following after him, I should suspect that all Philadelphians would be either sensitive, or calloused, or genuinely concerned about the slums. To the visitors to Philadelphia, I want to say that I have examined slum areas in over one hundred cities in the United States—from coast to coast and border to border and in cities of all sizes—and the slums of Philadelphia are probably the worst in the Nation. Maybe there are some close contenders, but I think Philadelphia's slums are the worst.

But I have no intention of castigating Philadelphia for its slums, nor of entering into any exploration of the complex and difficult problem of what to do about them. We will just put them down on the debit side of the ledger.

Let us come to another problem, in which houses, and commercial establishments, and land use, and land values, and taxes are all jumbled up. And that is the problem of what is happening in the close-in parts of town.

Philadelphia has stopped growing. Not only that, Philadelphia is shrinking. In 1940 there were about 20,000 people less in Philadelphia than in 1930. (Actually, 19,637.) Well, that is only a one percent decrease. But that's net. In the same decade there were over 61,000 more persons born in Philadelphia than died in Philadelphia. So in 1940 there were not only 20,000 people less than in 1930; there were another 61,000 that should have been here that were not. That is an actual loss of 81,000, or four percent. These figures of course are not a scientific analysis of population trends: they are intended simply to illustrate the fact that population decline has set in.

It is easy to say that defense activities will bring in that many. Sixty thousand workers will mean a total of many more persons than that coming in, when we consider the families of workers, and persons employed in secondary occupations, and their families. That is all a problem I have not time to get into today—and there is a vital planning story in it. But it is too bad we have to have a war to keep Philadelphia from dying a little bit.

But you have not heard the real story yet. Take just that 20,000 net decrease in the ten-year period. That is the decrease over the whole

city. The decrease in the inner five-mile circle centered on City Hall was over 78,000. Where did they go? Apparently just farther out: 78,000 out of the inner circle, 20,000 entirely out of the city. That means that 58,000 stayed in the city, and the population increased outside the five-mile circle and out into the city suburbs and seven adjacent counties by 128,000. Wherever they went, the significant thing is that the outward move is underway, and that twelve score and nineteen years after this city was founded it must be admitted that it is decaying.

When I drove through the area east of Broad Street and north of Spring Garden and Girard Avenues I saw the results of the blitzkrieg of deterioration. That may be the worst deterioration—it is probably the most spectacular—but in varying degree, desolation and decay are at work at the heart of the city.

There are about 80,000 physically substandard dwelling units in Philadelphia, about 15 percent of the total number of dwelling units in the city. Those 80,000 are dwellings which are of themselves physically unfit. But that is not a true measure of the adequacy of housing. To simplify it, there are four essentials to good housing:

1. Adequacy of the dwelling unit itself, in arrangement, space and equipment.

2. Proper relation of the dwelling unit, or of the group of which it is a part, to its site, assuring adequate light and air and auxiliary space.

3. Proper relation of the site to the neighborhood, considered as a community unit of the city, provided with necessary community facilities and possessing an integration of its own.

4. Proper relation of the neighborhood in the structure of the city, taking its land-use and population-density characteristics from the land-use and population-density plan of the city as a whole, fitted into the physical structure of the city, and able to maintain its character against destructive forces.

Measured by those standards, the percentage of substandard dwellings in Philadelphia is not 15 percent, but several times that amount, to a total of several hundred thousand. We are not talking alone about slums, but deteriorated neighborhoods and those subject to deterioration. Out in the West they used to say that the silt content of the Colorado River was so great that the River was too thick to drink, but not quite thick enough to plow. This vast aggregation of marginal dwellings that I am talking about is not bad enough to be called slums, but is not good enough to hold its population.

Seventy-eight thousand persons moved out of the inner five-mile circle, leaving streets and utilities and the necessity for continuing public services in the area, with a declining valuation base to take care of it. It is not a cyclic thing—up and down—it is down, down, down. Walter Thomas has suggested that Philadelphia should grow horizontally rather than vertically. If that statement be properly

interpreted so as to free it from the danger of being used by the unthinking as a catch answer, as a substitute for analytical thinking, there is truth in it. But it is not quite so simple as that. Just let this deterioration in the central areas continue, and spread in a vast, widening ring around the center of the city, and Philadelphia will be so darned horizontal that it will not even be able to sit up and take nourishment.

The City of Philadelphia is facing one of the most heartbreaking and difficult tasks that ever confronts a municipal executive—increasing costs and declining tax base.

I am not exclusively a prophet of doom. There is an answer. If an industrial concern had a similar problem, it would want to try to do something about it. And the first thing it would do would be to get some facts about the situation and see what was happening, and then work out a plan of action. That same process applied to a city is just city planning. I mean real city planning. You have had some city planning efforts; some of them have been city planning spasms; and you have a great mass of vitally important data—$950,000 has been expended in the collection of data during the past few years—but you have not had any real city planning. You have magnificent parks, but the plan of the park system is not a city plan, nor is any other element of the city. And some elaborate scheme to spend a lot of public funds is not a city plan. (You will have enough of that after the war—now is not a time to dig into the store of projects which ought to be on the shelf waiting to help take up the post-war slack.) City planning is just an exercise of prudence and good sense. Not doing it is like driving an automobile down a busy street while wearing blinders that permit a view only a car-length ahead.

Obviously, I cannot prescribe what should be done. But it can be done. It is possible to carry forward a program which will protect the existing good neighborhoods of the city, reclaim those that have decayed, and protect new developments against sowing into them the seeds of their own future decay. But it cannot be done by wishful dreaming, or by compartmentalized thinking; it cannot be done by buying streamlined garbage trucks in place of what you have. It calls for getting down into the essentials of the economic and social characteristics of the city, finding out what it all means, and what needs to be done about it. And that cannot be done by having a planning commission which does not have closely knit procedural relationships with the operating city departments.

It cannot be done by having a planning commission which is provided by the city government with a budget consisting solely of good will (and I really do not know how much of that).

City planning can be made to work. But certain essentials must be observed: (1) It must be taken seriously as a continuing function of municipal administration. The city does not expect that the work

of the city clerk, or of the treasurer, or of the tax collector shall be performed by a volunteer committee of citizens. I believe that the function of protecting the physical integrity and the financial soundness of the city is fully as important as the functions I have just named. (2) There must be a clear understanding of what the planning process is and how it works. (3) Planning must be geared into the administrative processes of the municipal administration. It must be intimately associated with the functioning of the operating city departments. There is no place for high priests or prima donnas in effective city planning.

There are four steps to the planning process. First, is the assembling of adequate basic data about the city, its land uses, its population, its property values and a great variety of social and economic characteristics. Many of these data have already been assembled for Philadelphia.

The next step is the analysis of the basic data, in order to determine relationships among various types of land use, and these in relation to population characteristics and trends; to determine the basic economic and social character of the city; to evaluate its housing; to discover trends of development and what they mean; and to understand population potentialities.

Then comes the preparation of guiding plans—not the old limited, compartmentalized concept of city plans which we once had, not purely the magnificent and costly—but plans which get down to the fundamentals of the structure of the city and the services to be rendered to its citizens. There must be a determination of broad objectives and standards. There must be a basic land-use and population density plan. There must be a housing plan, designed to maintain adequate housing standards and to assure adequate housing for all the people of the city. There must be a plan of the physical "plant" of the city, its streets, its utilities, its parks, its public buildings and other physical facilities. These things in the aggregate constitute the city plan.

The fourth step is doing something about it all. City plans are useless things unless they are put to work. You cannot live in a blue print: you have to build the house first. And a city plan which is not put to work is of no more value than the blue print of a house which is never built. The various procedures of public administration must be called upon to make the plan effective. These include (a) regulatory measures, such as zoning, (b) use of the plan as a guide in current municipal operations, and (c) the long-term capital budget.

By these means effective planning can be done.

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